BenQ FP791

LCD Color Monitor

17.0" (43.2 cm) LCD Panel Size

User's Manual

Copyright

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Safety Instructions

1. The AC plug isolates this equipment from the AC supply.
2. Unplug this product from the wall outlet before cleaning. Clean the LCD monitor surface with a lint-free, non-abrasive cloth. Avoid using any cleaning solution or glass cleaner.
3. Slots and openings on the back or top of the cabinet are provided for ventilation. They must not be blocked or covered. This product should never be placed near or over a radiator or heat source, or in a built-in installation unless proper ventilation is provided.
4. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
5. Never push objects of any kind, or spill liquid of any kind into this product.
6. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltages or other risks. If any of the above mentioned misuse or other accident (dropping, mishandling) occurs, contact qualified service personnel for servicing.
7. The power supply cord serves as a power disconnect device for pluggable equipment. The socket outlet should be installed near the equipment and be easily accessible.

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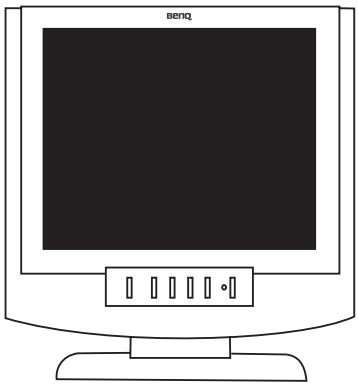
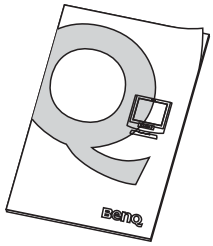
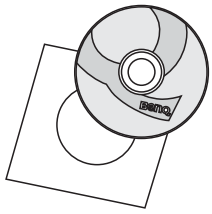
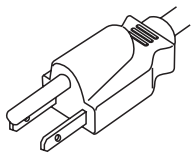
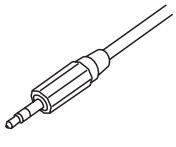
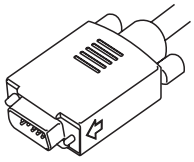
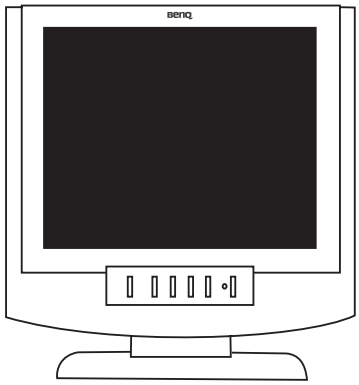
Unpacking

Please check you have the following items. If they are missing or are damaged, please immediately contact the dealer at which you purchased the goods.

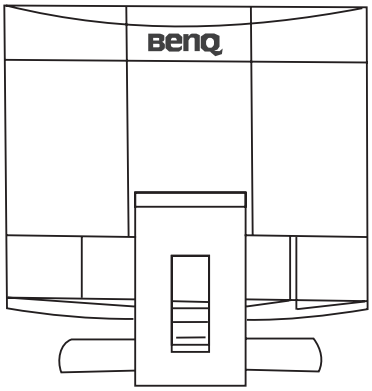
BenQ LCD Monitor	
Quick Start Guide	
CD-ROM Disk	
Power cord	
Audio cable	
Signal cable: D-Sub	

Views of the Monitor

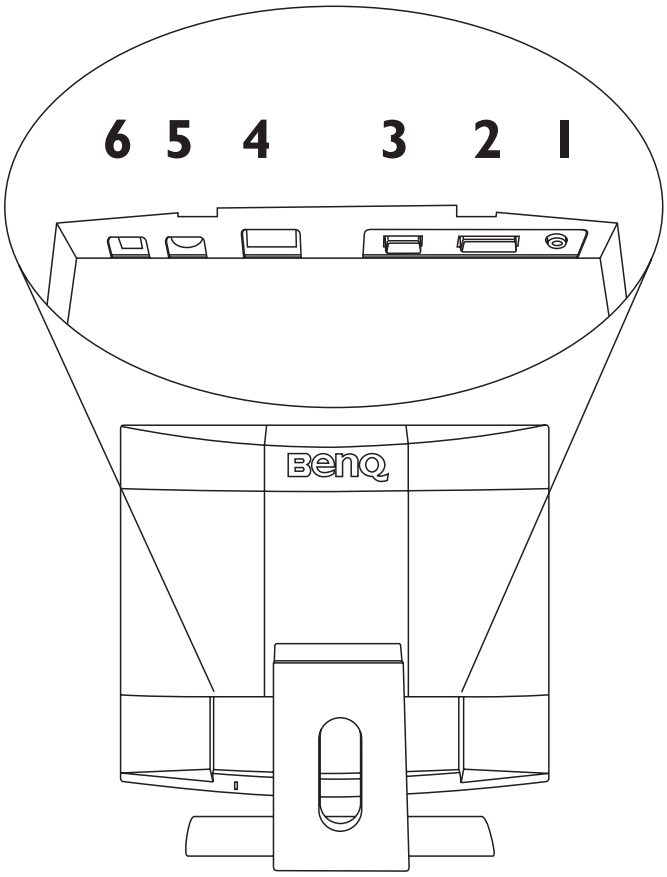
Front View



Back View (1)



Back View (2): Locations of plugs & sockets



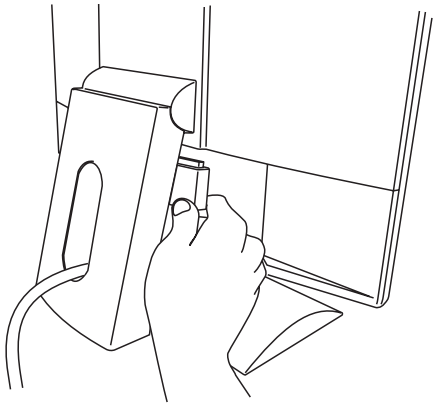
1. Audio connector (Audio input)	2. DVI-D connector
3. D-Sub connector	4. Power AC input jack
5. DC 12V output	6. USB connector

Installation

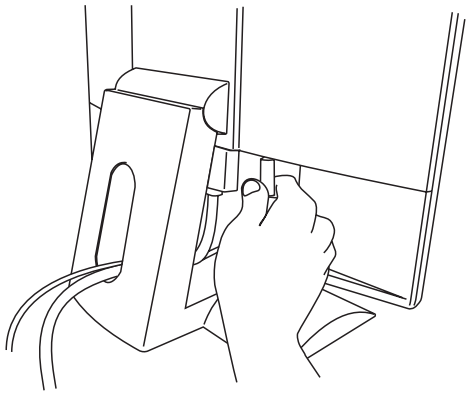
Hardware Installation

Make sure that the computer and monitor's power are both turned off. Please follow the steps to install your LCD monitor.

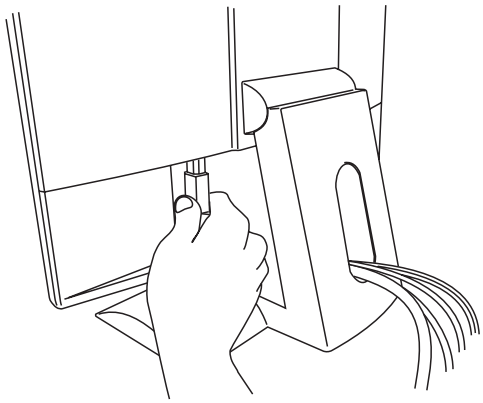
1. Connect signal cable to the LCD monitor.



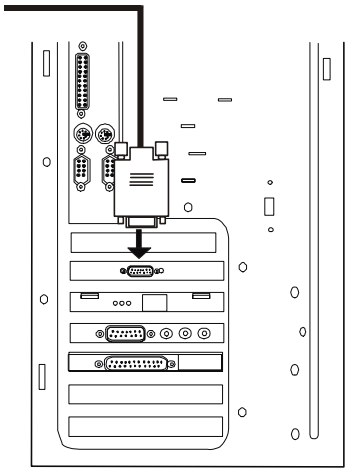
2. Connect audio cable to the audio jack.



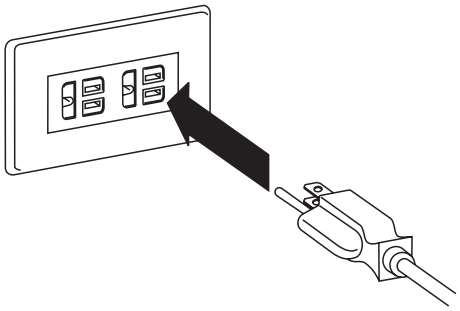
3. Connect the power cord to your LCD monitor.



4. Connect the other end of signal cable to the signal connector of your computer. Connect audio cable to your computer.



5. Connect power cord to an AC power socket.



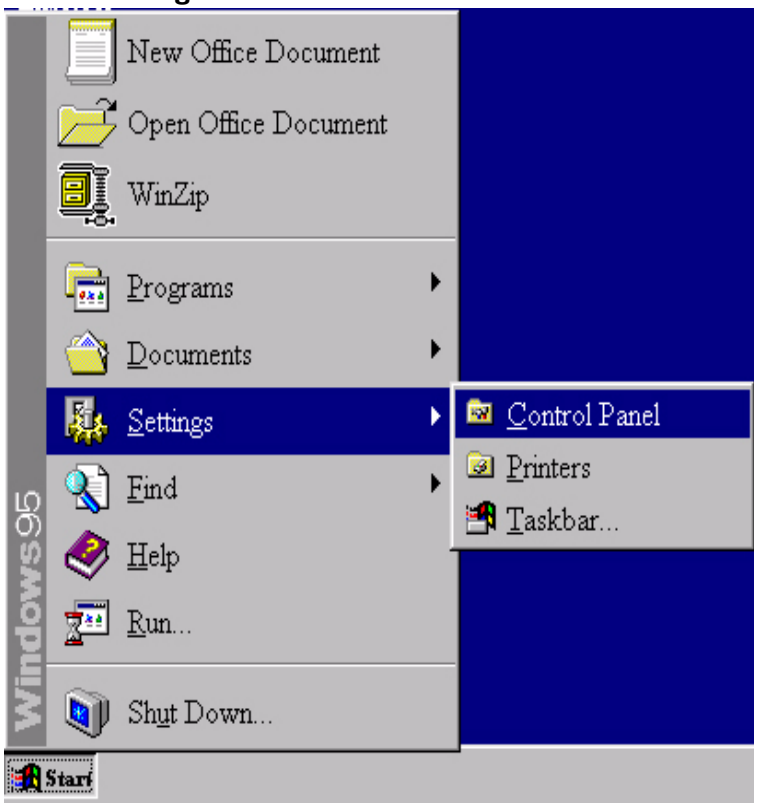
Software Installation

A. Microsoft® Windows® 95/ 98/ 2000/ XP

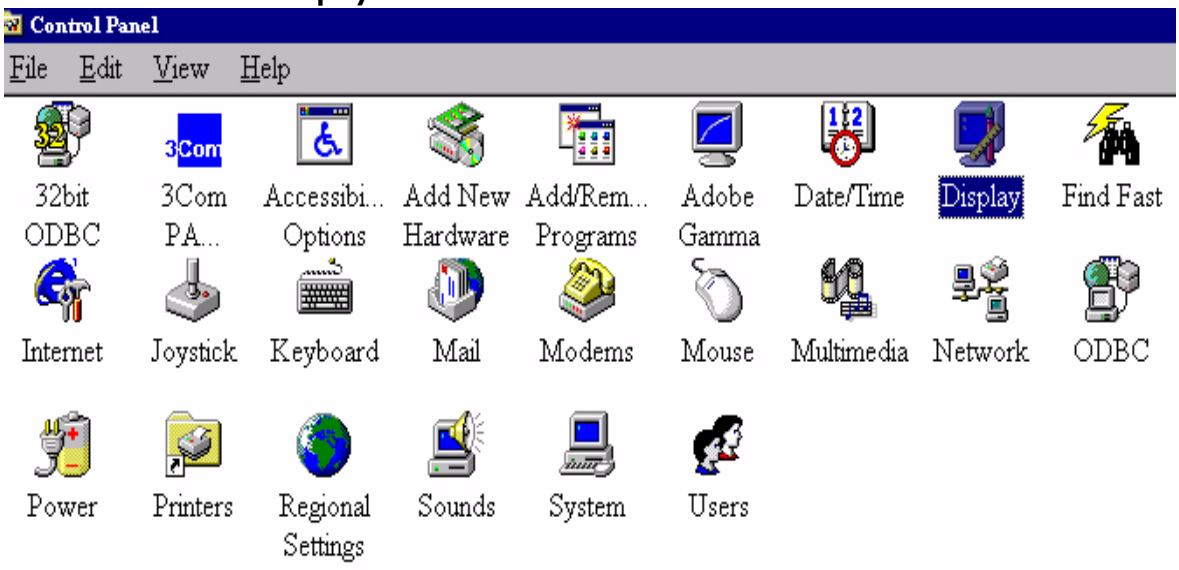
If you are using Windows 95, Windows 98, Windows 2000 or XP as an operating system, you have to set up the correct monitor driver.

Windows 95. The first time you start Windows with a new monitor, the system will detect it and automatically install the driver for plug and play displays. To install the current driver from CD, proceed as follows:

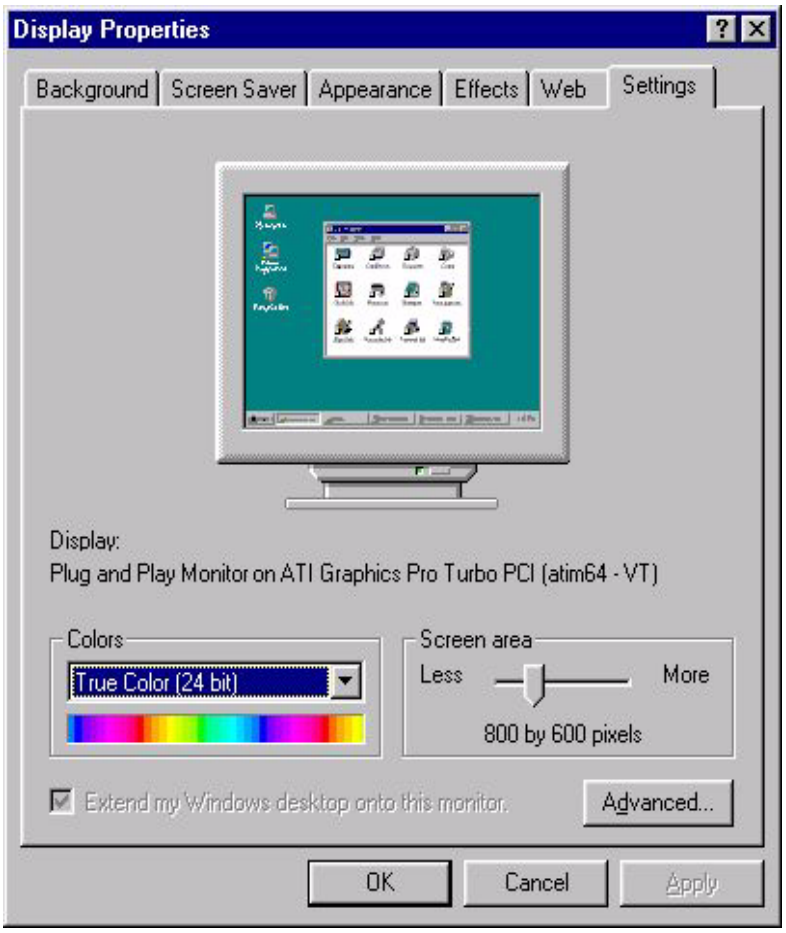
1. Insert "**BenQ LCD Monitor**" CD-ROM into your CD-ROM Driver.
2. Click "**Start**" then "**Settings**".



3. Double click the "**Display**" icon in the Control Panel.

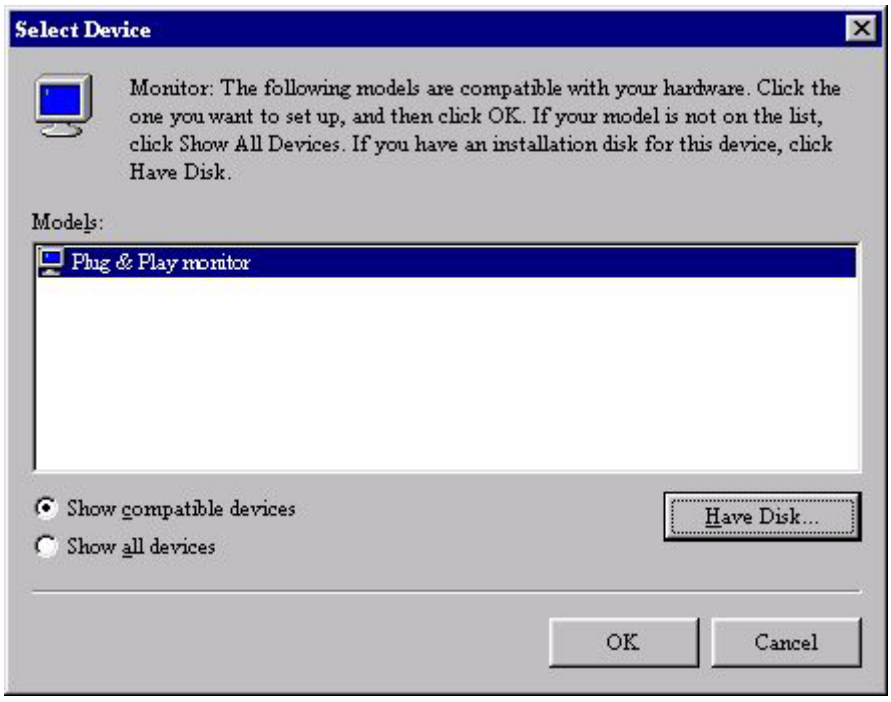


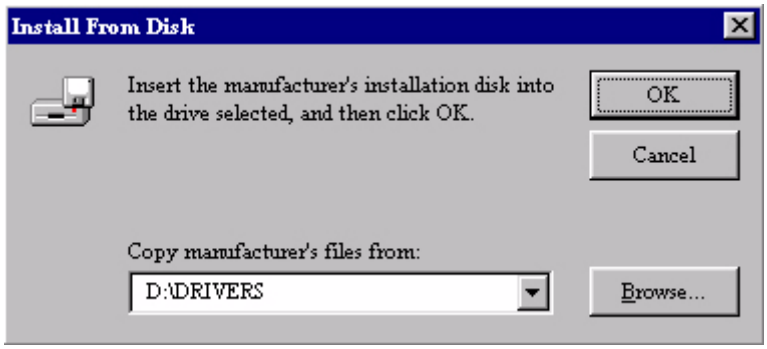
4. From the "**Display properties**" window, select the "**Settings**" tab. Click the "**Advanced...**" button in the bottom right corner.



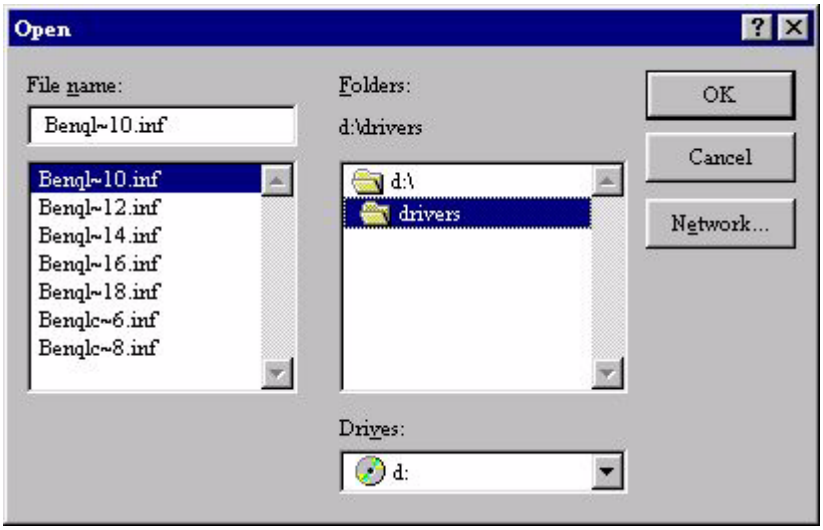
5. Select the "**Monitor**" tab. Click the "**Change**" button in the top right corner.

6. Now click the "**Have Disk**" button in the bottom right corner. Another window appears. Select the "**Browse**" button.

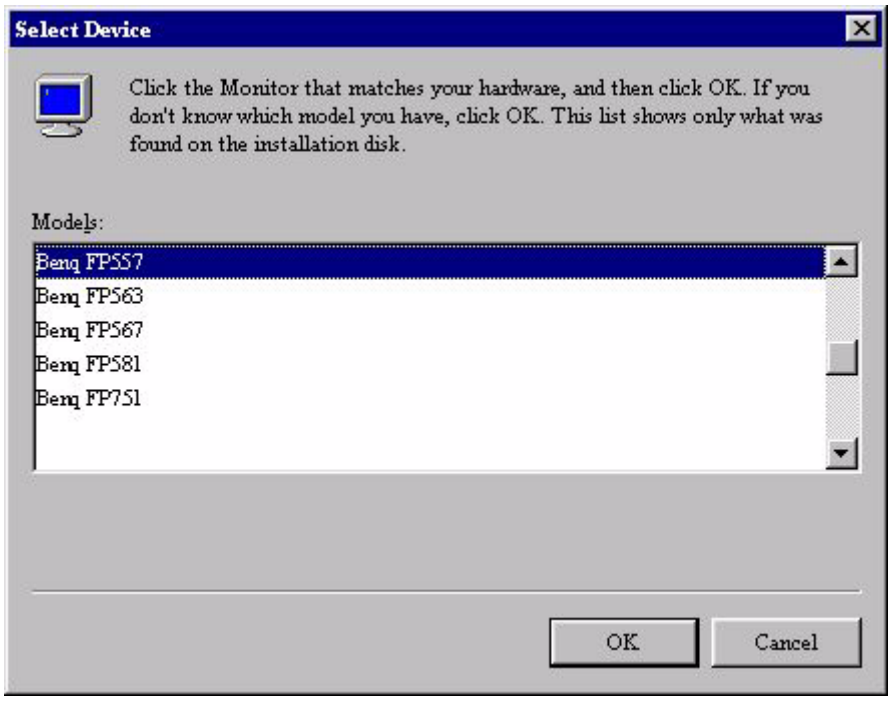




7. Insert the supplied CD into your computer. Select the CD-drive from the drop-down menu.
8. In the field above the drive selection, change to the "**Drivers**" folder. The current driver files are located there. Press "**OK**" and the window closes.



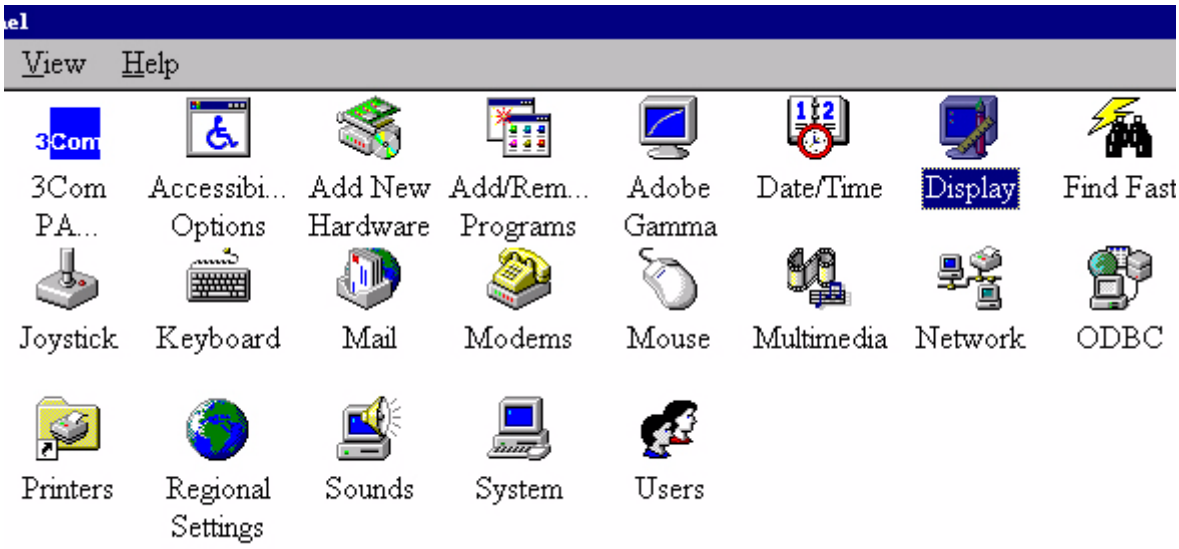
9. By pressing "**OK**" again in the next window you will be given a list of compatible devices. Select "**FP791"** from the list and press "**OK**" again.



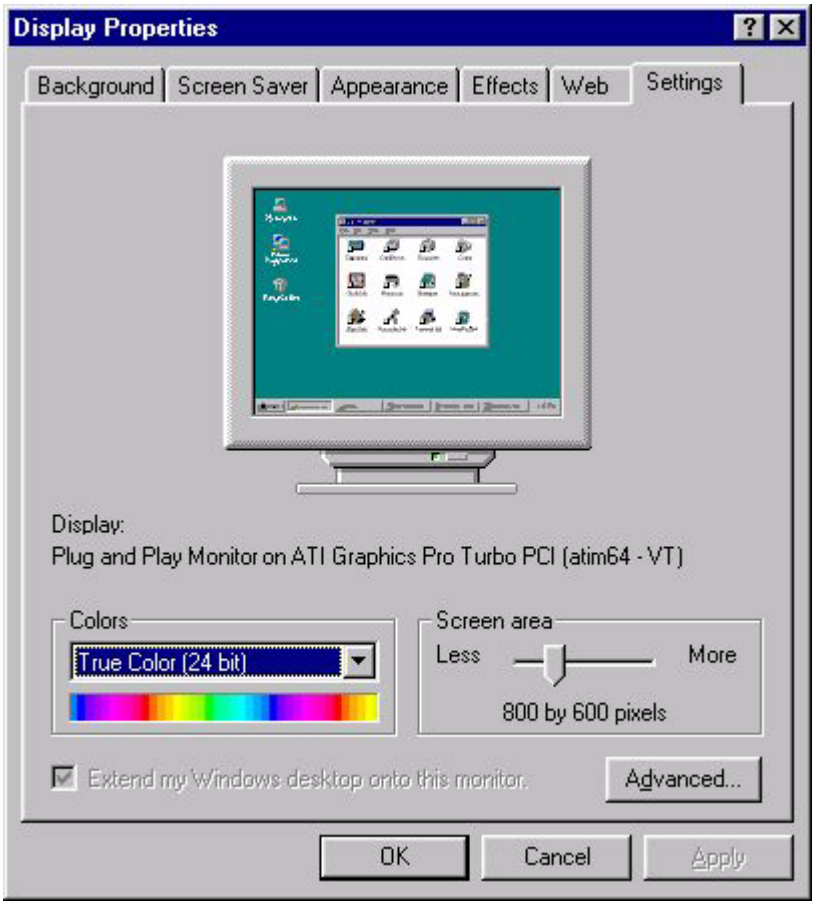
10. Now you are back to "**Advanced Display Properties**". Close this window by clicking "**OK**" and confirm the following messages with "**Yes**". Click "**OK**" and "**Yes**" again. The installation is now completed. You can close "**Display Properties**".

Windows 98 To manually install or update the driver, perform the following steps:

1. Open the control panel and double-click "**Display**" icon.

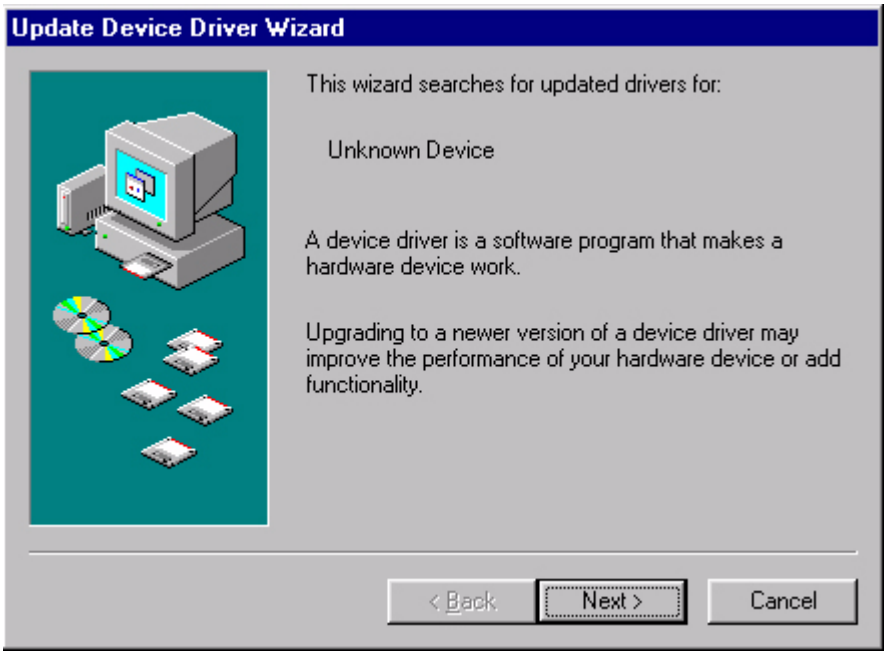


2. From the "**Display Properties**" window, select the "**Settings**" tab. Click the "**Advanced...**" button in the bottom right corner.



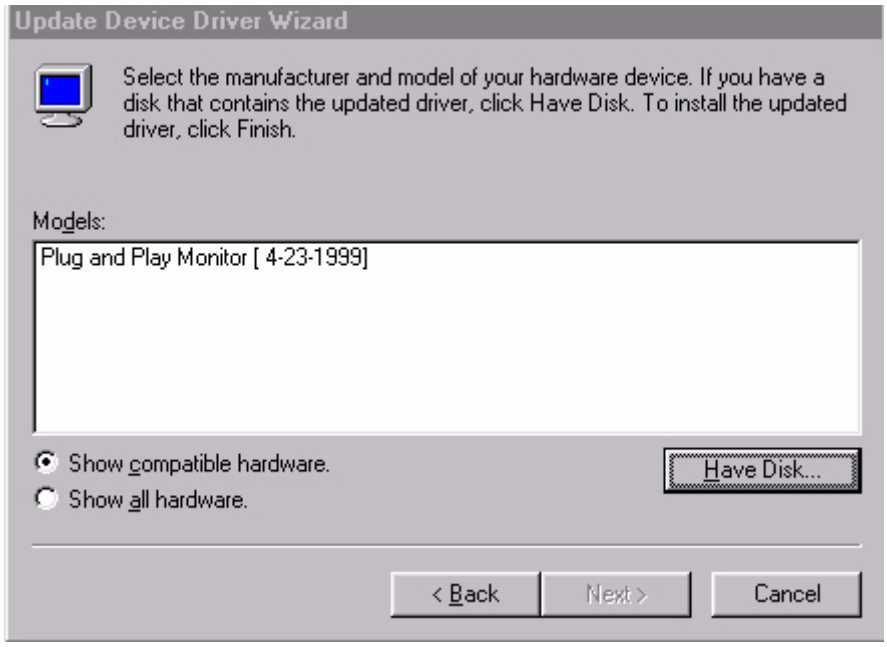
3. Select the "**Monitor**" tab. Click the "**Change**" button in the top right corner.

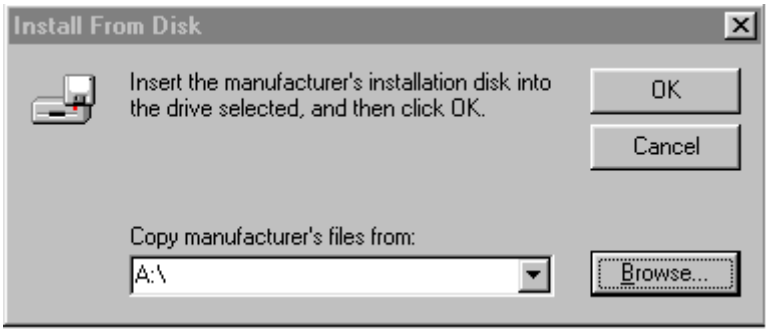
4. The "**Update Device Driver Wizard**" opens. Confirm by clicking "**Next**".



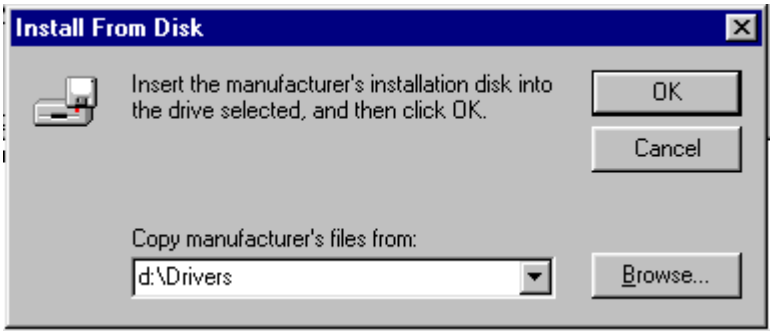
5. Select "**Display a list of all drivers in a specific location, so you can select the driver you want.**" and press "**Next**".

6. Now click the "**Have Disk**" button in the bottom right corner. Another window appears. Select the "**Browse**" button.

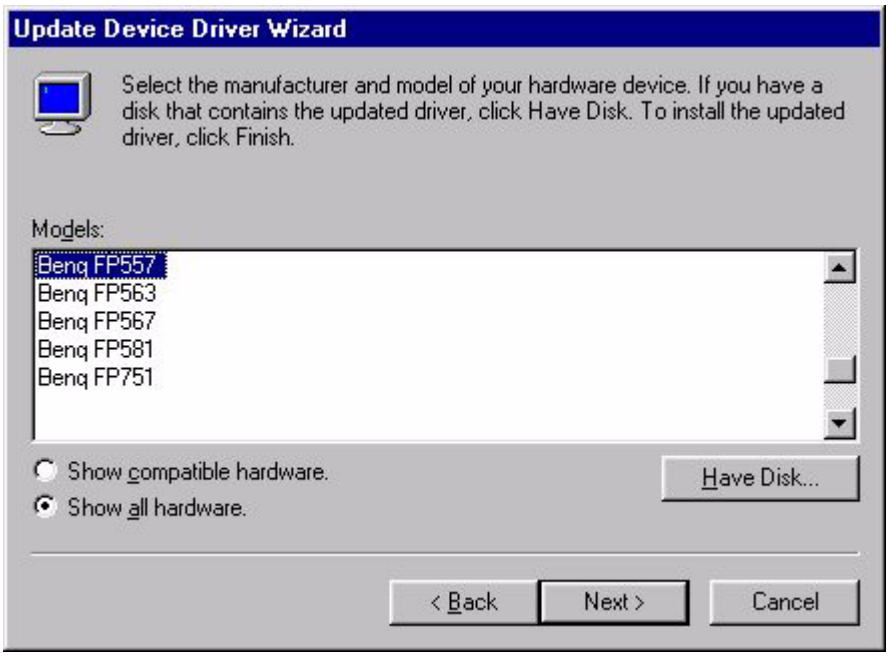




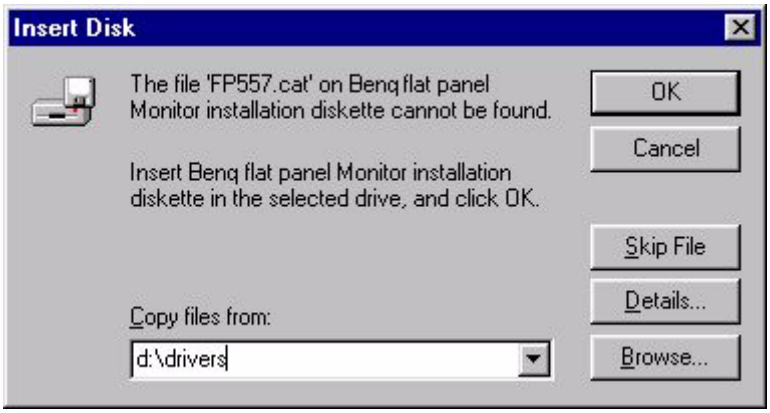
7. Insert the supplied CD into your computer. Select the CD-drive from the drop-down menu.



8. By pressing "**OK**" again in the next window you will be given a list of compatible devices. Select "**FP791"** from the list and press "**Next**" again.



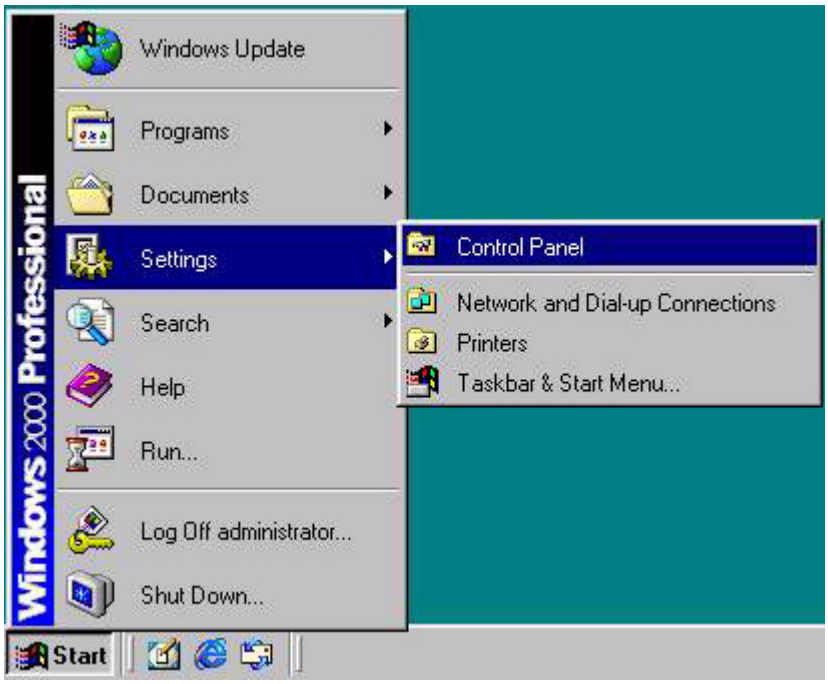
9. An "**Insert Disk**" dialogue box appears. Click "**OK**", and then click "**Skip File**".



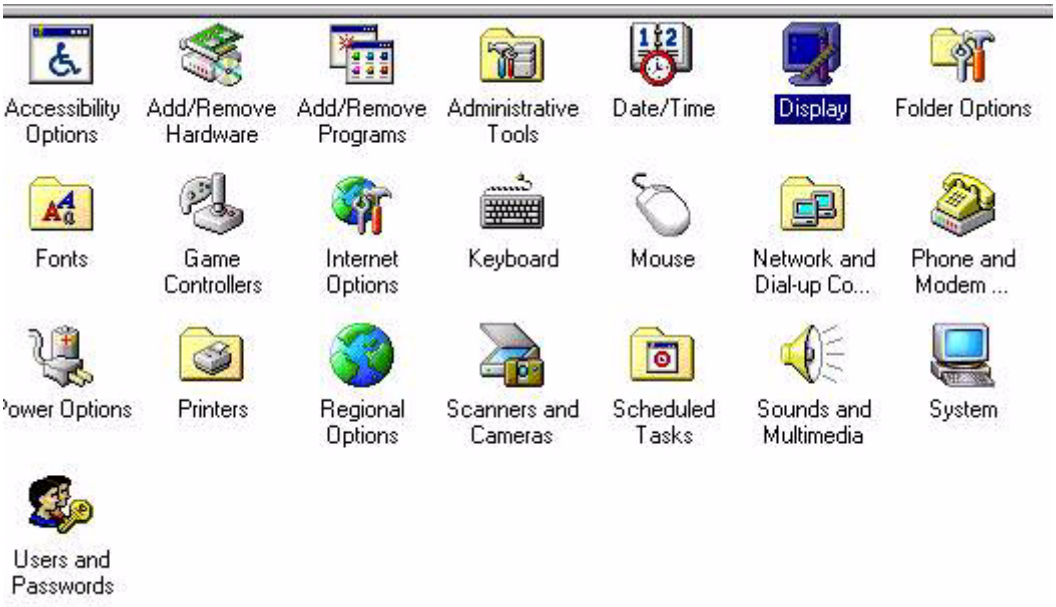
10. Close "**Update Device Driver Wizard**" by clicking "**Finish**" to complete the installation.

Windows 2000 The first time you start Windows with a new monitor, the system will detect it and automatically start the "**Add New Hardware Wizard**". Carry out the instructions beginning at step 4.

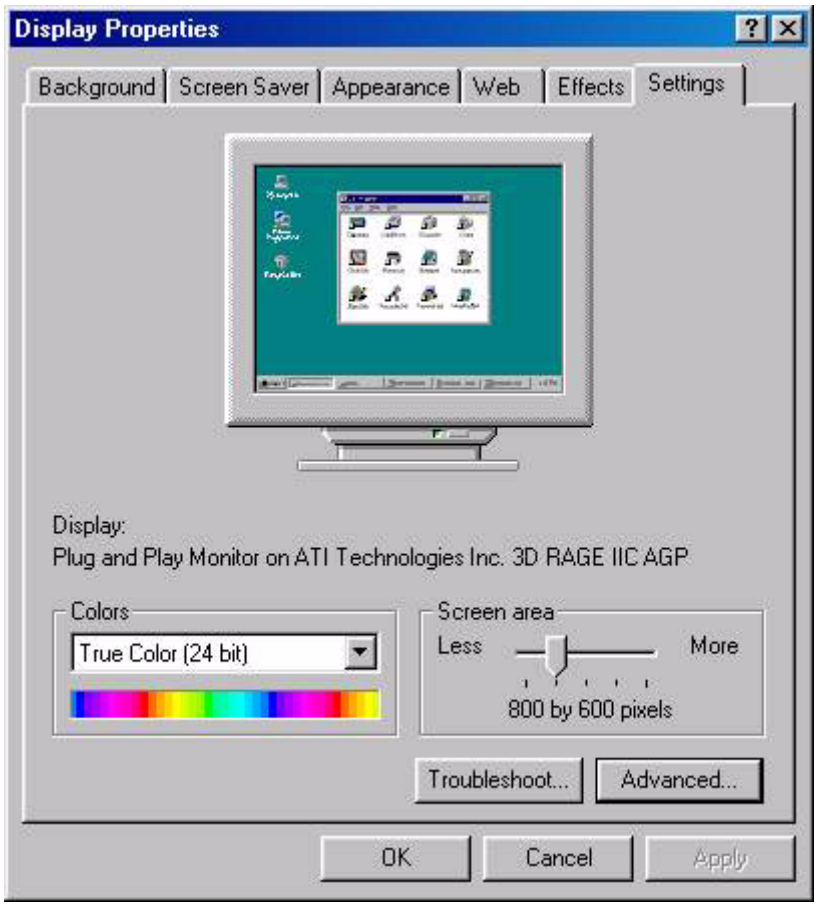
1. Insert "**BenQ LCD Monitor**" CD-ROM into your CD-ROM Driver.
2. Click "**Start**" then "**Settings**".



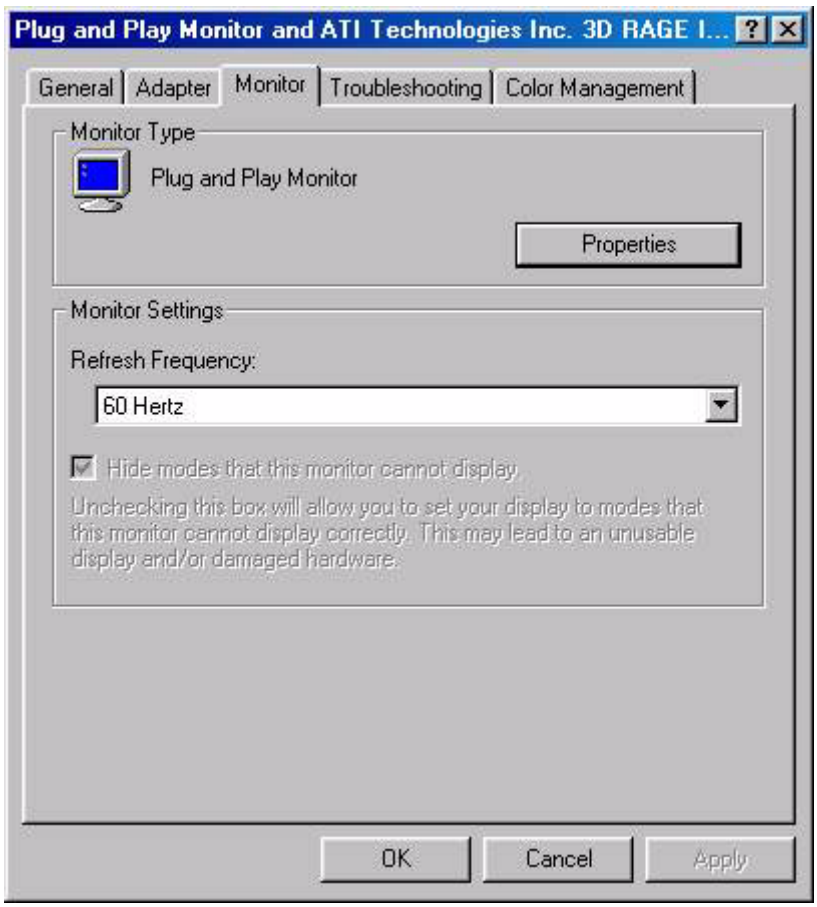
3. Open the Control Panel and double click on the "**Display**" icon.



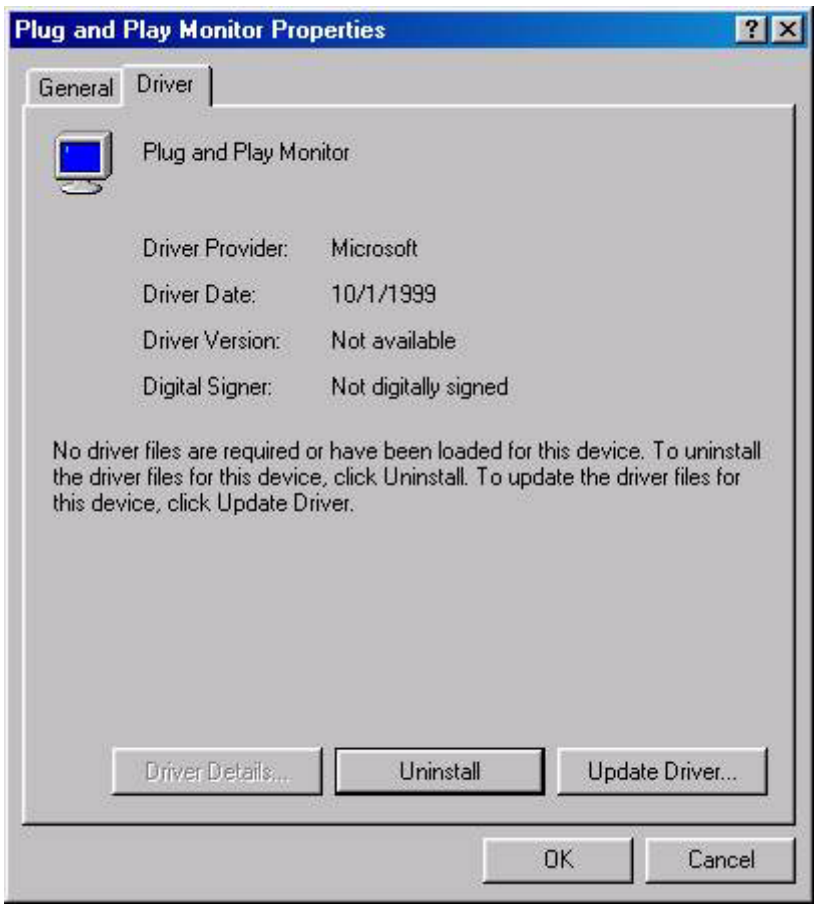
4. From the "**Display Properties**" window, select the "**Settings**" tab. Click the "**Advanced Properties**" button in the bottom right corner.



5. Select "**Monitor**" then click "**Properties**".



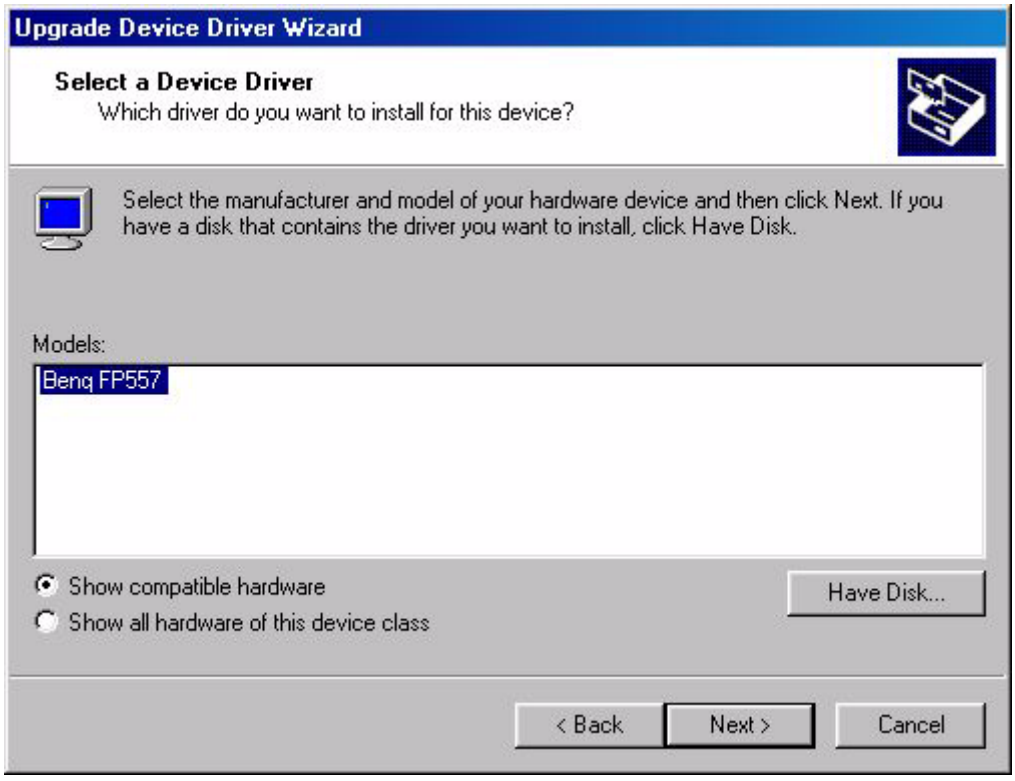
6. Select "**Driver**" tab then click "**Update Driver**".



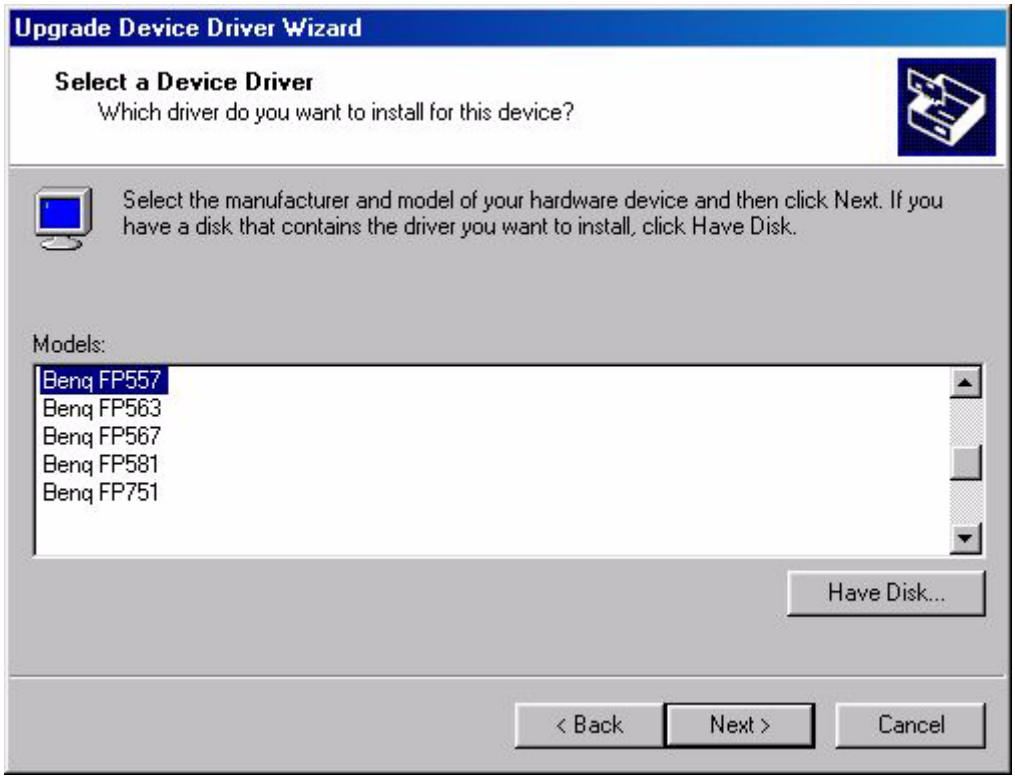
7. The "**Upgrade Device Driver Wizard**" will pop up. Then click "**Next**".

8. Select "**Display a list of the known drivers for this device so that I can choose a specific driver**" then click "**Next**".

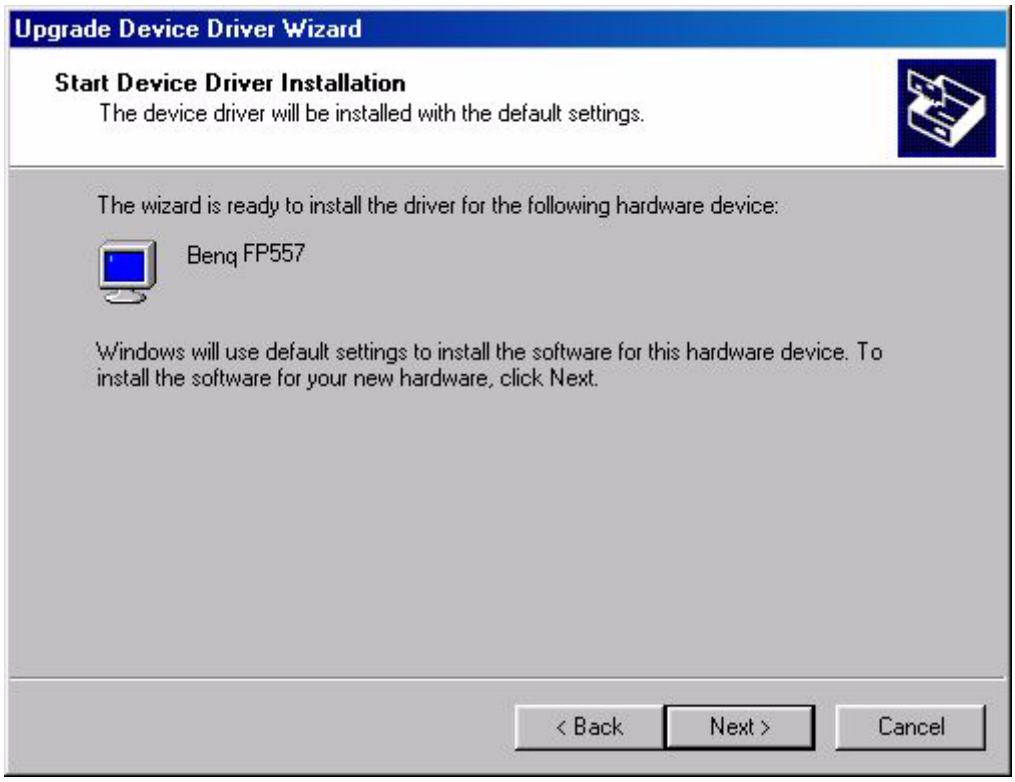
9. In the next window, click "**Have Disk**", then "**Install From Disk**" window will pop up. Click "**Browse**", the "**Located File**" will pop up.



10. Scroll down and select your CD ROM Driver, then click "**Next.**" .



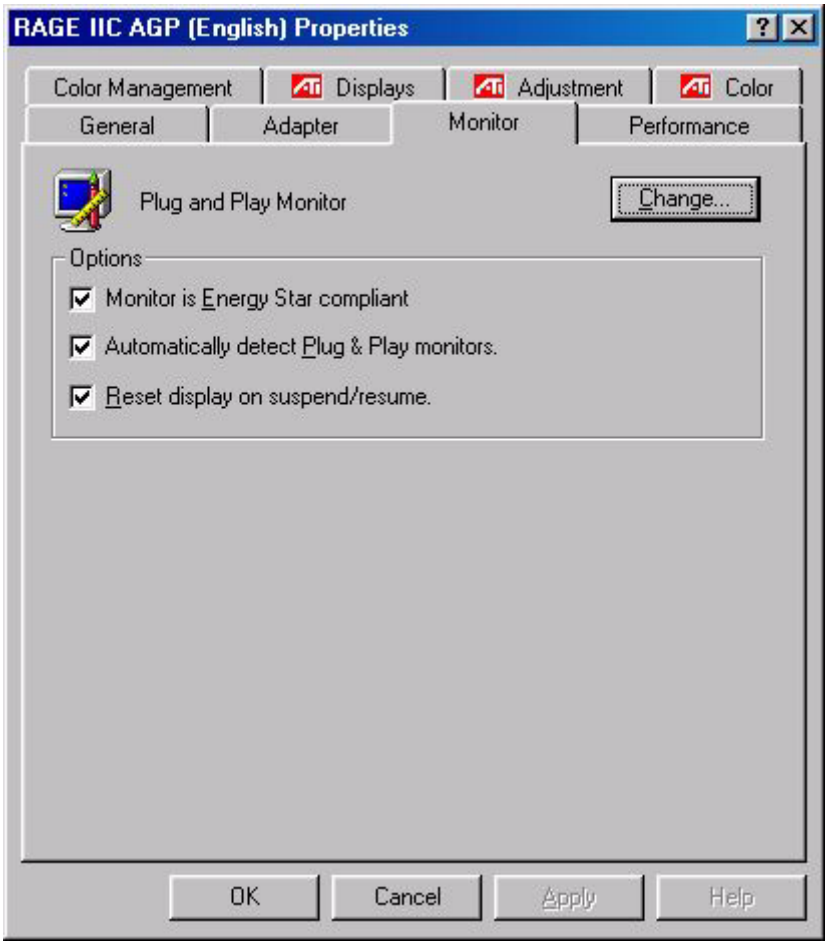
11. In the list of folders within the CD-ROM, select "**Drivers**" folder then click "**Open**" twice, then click "**OK**". Select your LCD Model (FP791) from the list in the next window then click "**Next**" twice.



12. The new drivers are now installed on your computer.

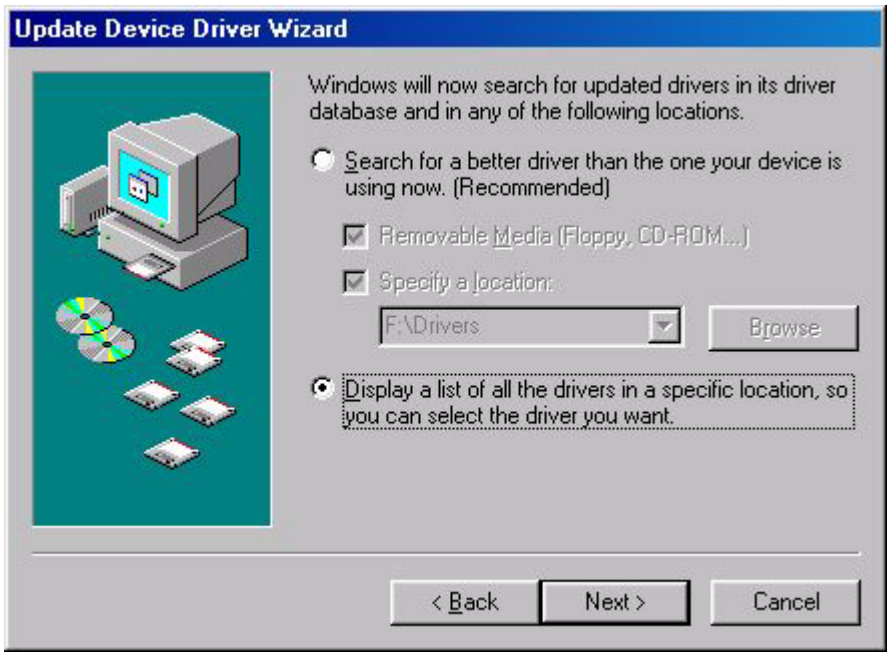
Windows ME To manually install or update the driver, perform the following steps:

1. Click "Start", "**Settings**", "**Control Panel**" and then double-click "**Display**".
2. In the Display Properties window, click the "**Settings**" tab and click "**Advanced...**".
3. Click the "**Monitor**" tab and then click "**Change**".

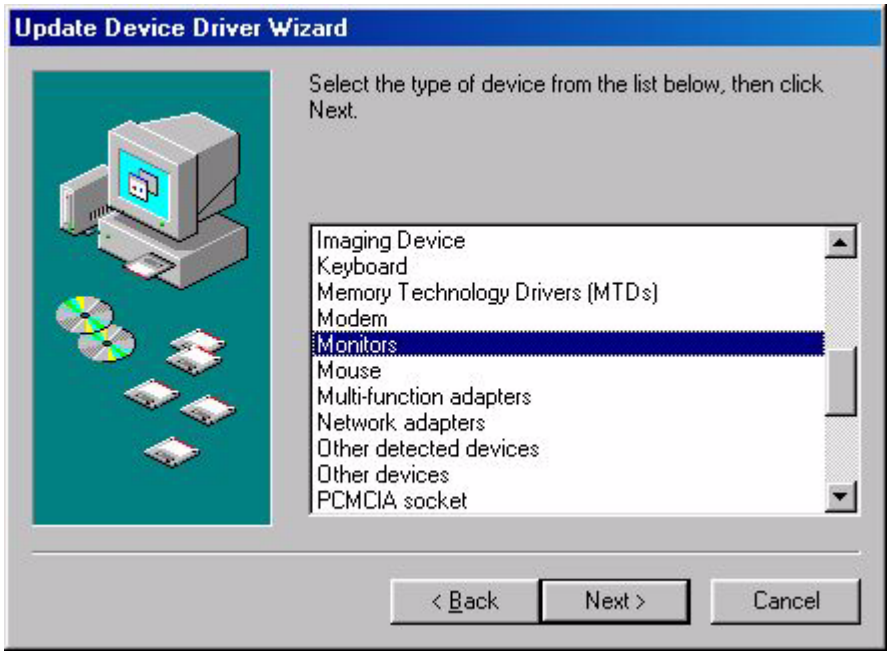


4. "**Update Device Driver Wizard**" dialogue box appears. Choose "**Specify the location of the driver (Advanced)**" and then click "**Next**".

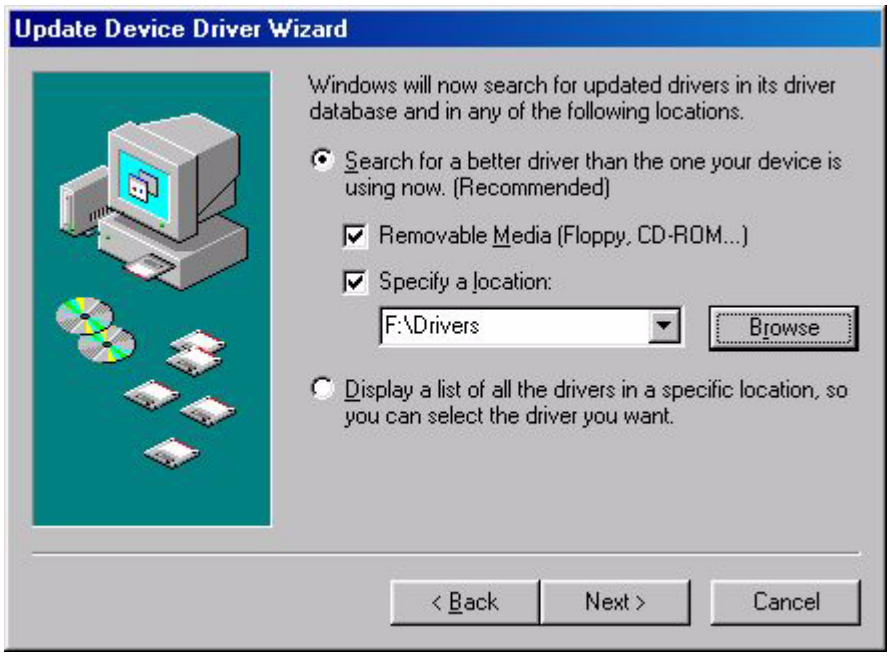
5. Choose "**Display a list of all the drivers in a specific location, so you can select the driver you want**" and click "**Next**".



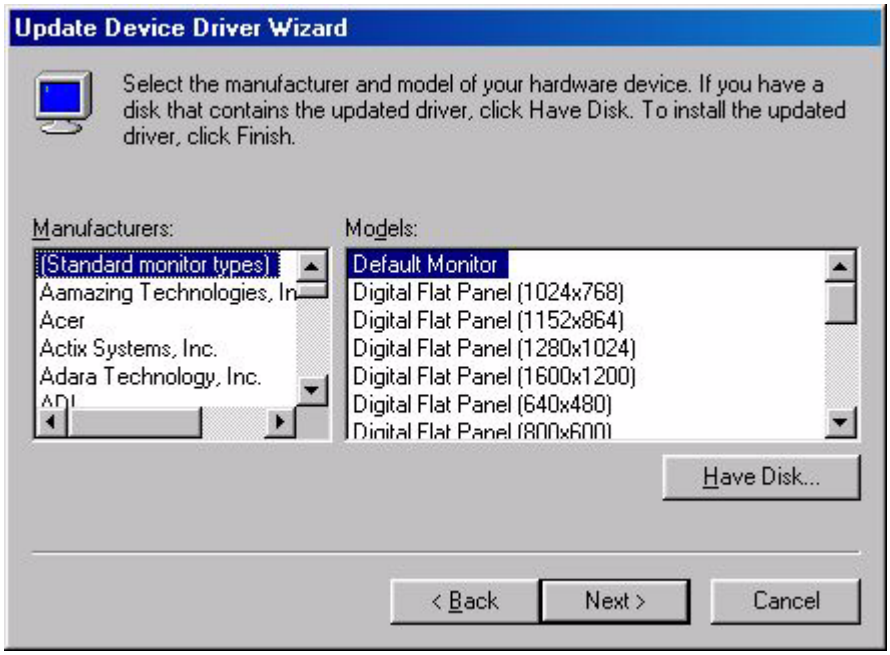
6. Choose "**Monitor**" from the list and then click "**Next**".



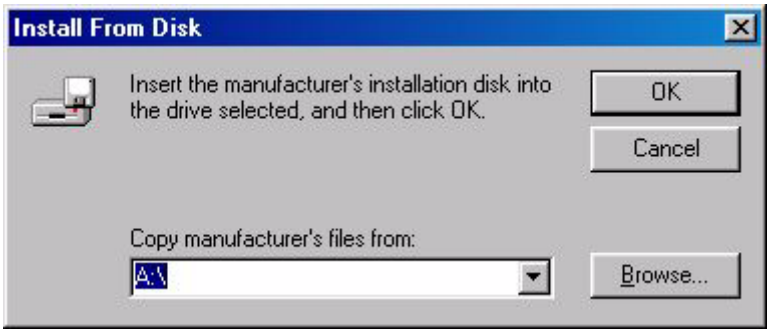
7. Choose "**Display a list of all the drivers in a specific location, so you can select the driver you want.**".

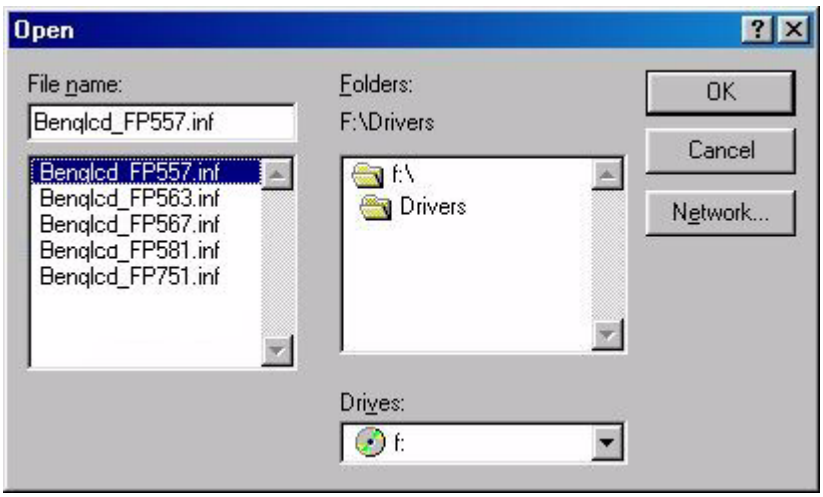


8. Click "**Have disk**" and then click "**Browse...**".

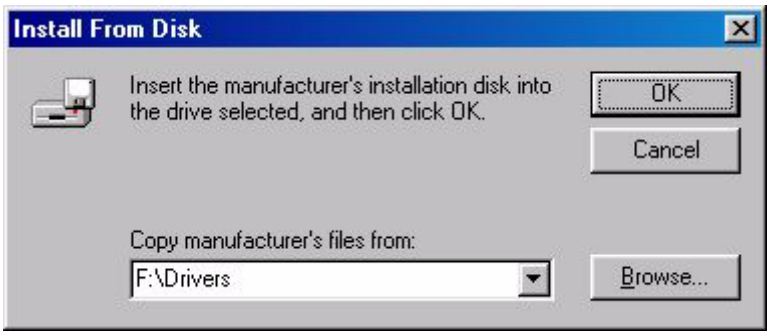


9. Insert "**BenQ LCD Monitor's CD**" into your CD-ROM and type d:\ (change the driver letter to match your CD-ROM driver if it is not drive D). Enter "**Drivers**" folder to select the model from the list left. Click "**OK**".

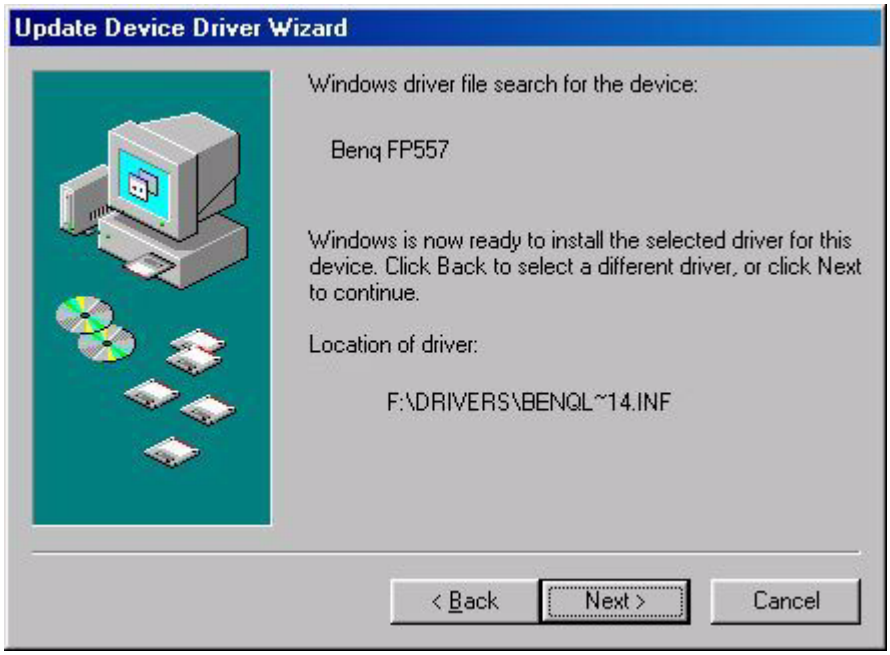




10. Click "**OK**" on the "**Install From Disk**" window. The dialogue box "**Update Device Driver Wizard**" appears. Choose the model from the list, then click "**Next**".



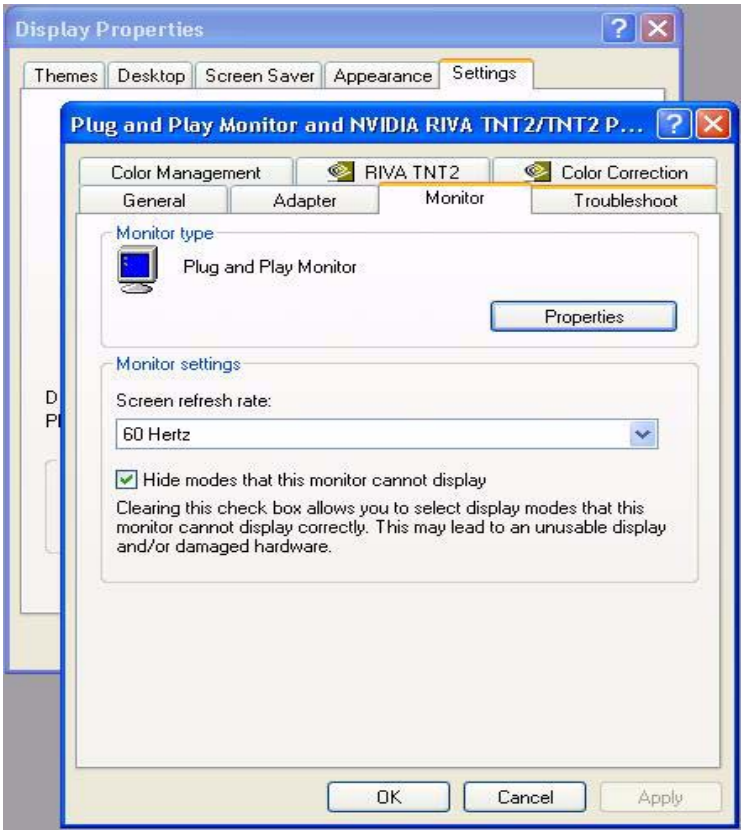
11. Click "**Next**".



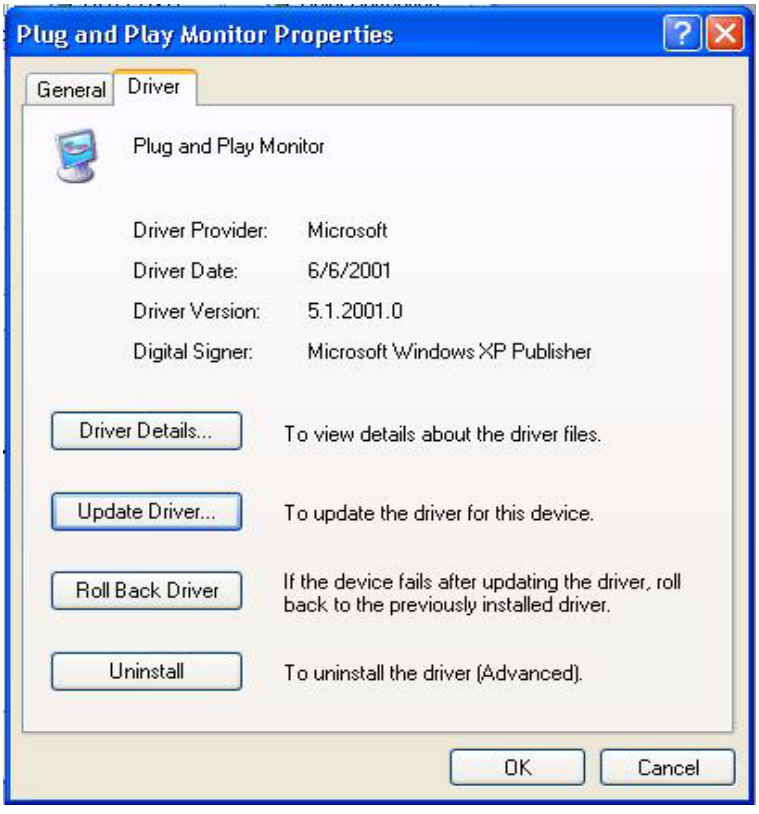
12. Click "**Finish**" to complete the installation.

Windows XP

1. Right click mouse on the desktop and choose "**Properties**". Select "**Settings**" tab and click the "**Advanced**" button. A small window will pop up. Select the "**Monitor**" tab in the new window and then click "**Properties**".

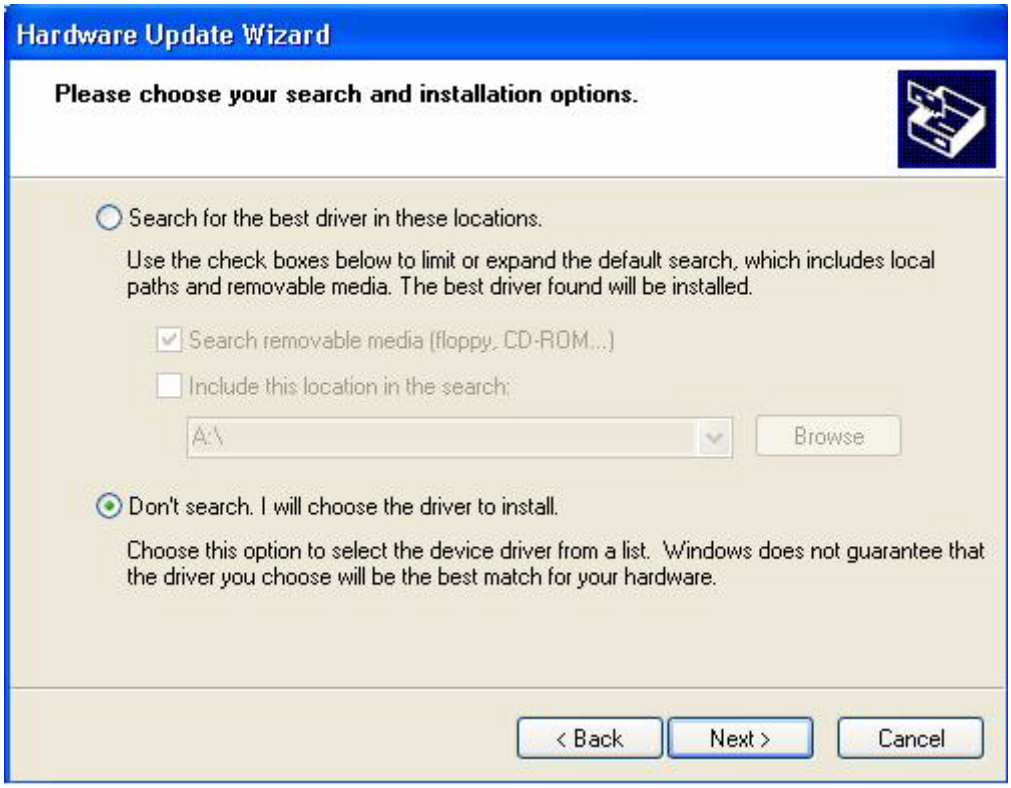


2. Select "**Driver**" tab and then click "**Update Driver...**"

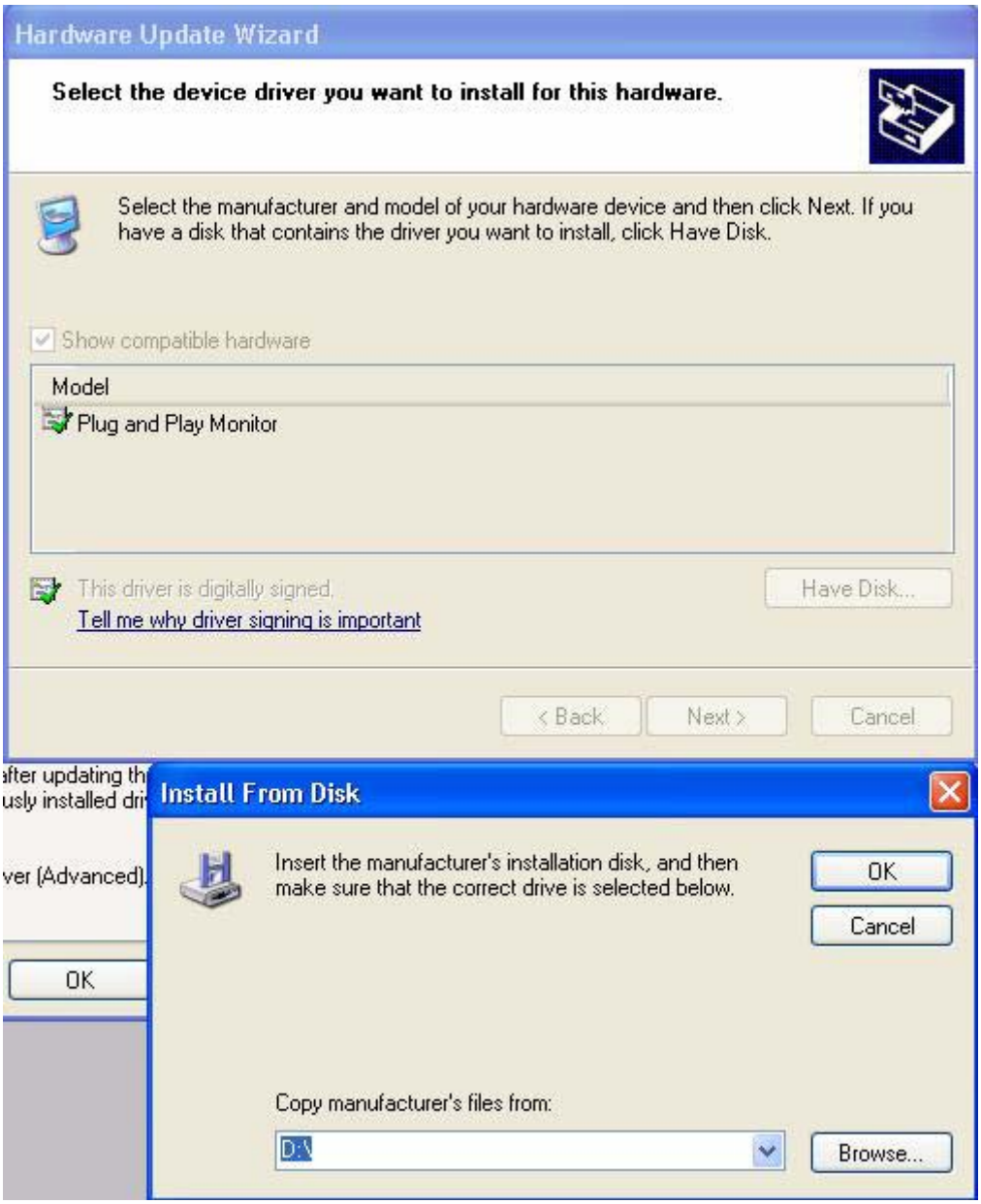


3. The "**Hardware Update Wizard**" will pop up. Then click "**Next**".

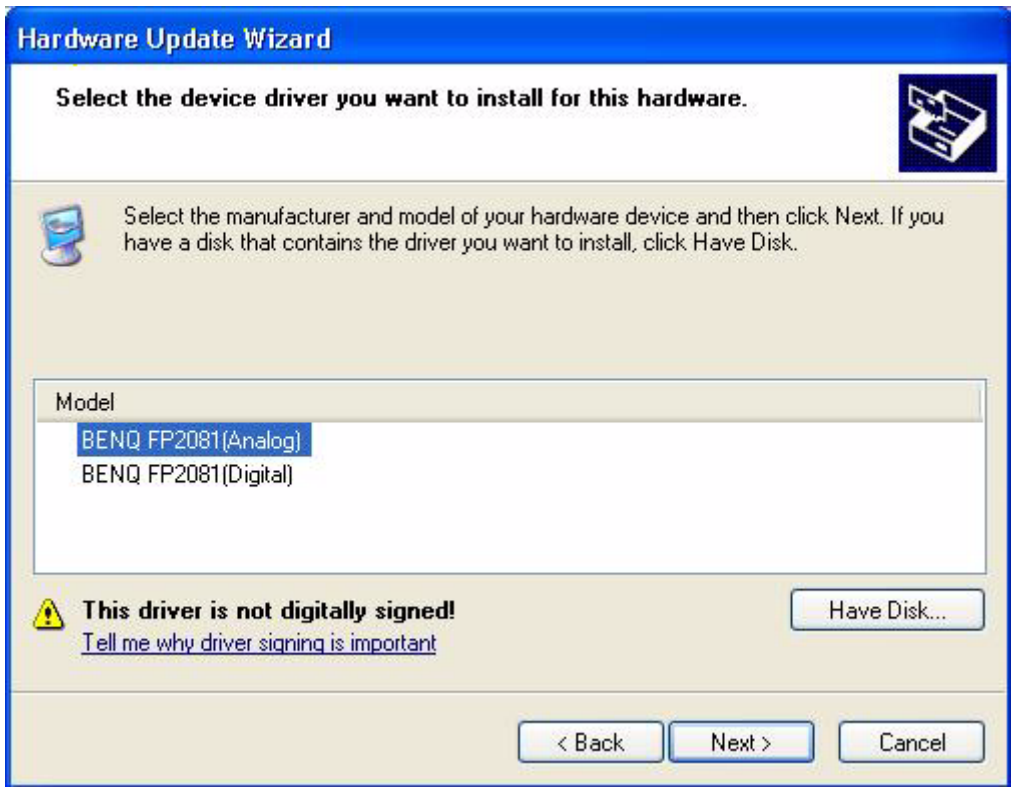
4. Select "**Don't search. I will choose the driver to install**" and then click "**Next**".



5. In the next window, click "**Have Disk…**", an "**Install From Disk**" window will pop up. Click "**Browse**". The "**Locate File**" window will pop up.



6. Select your driver and then click "**Next**".

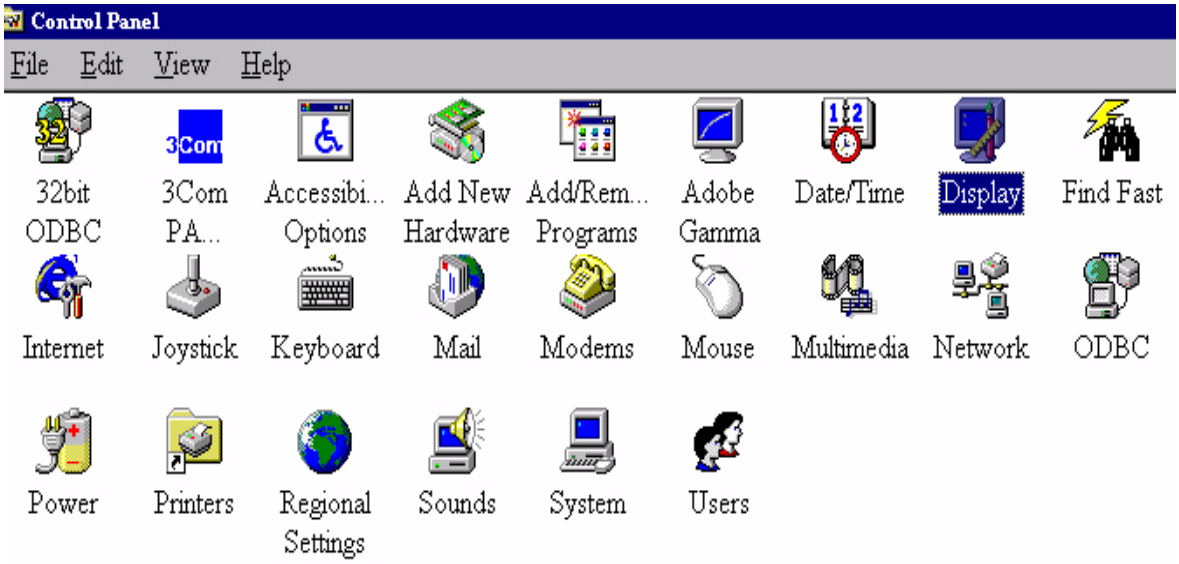


7. The new drivers are now installed to your computer. Click "**Finish**" to exit installation.

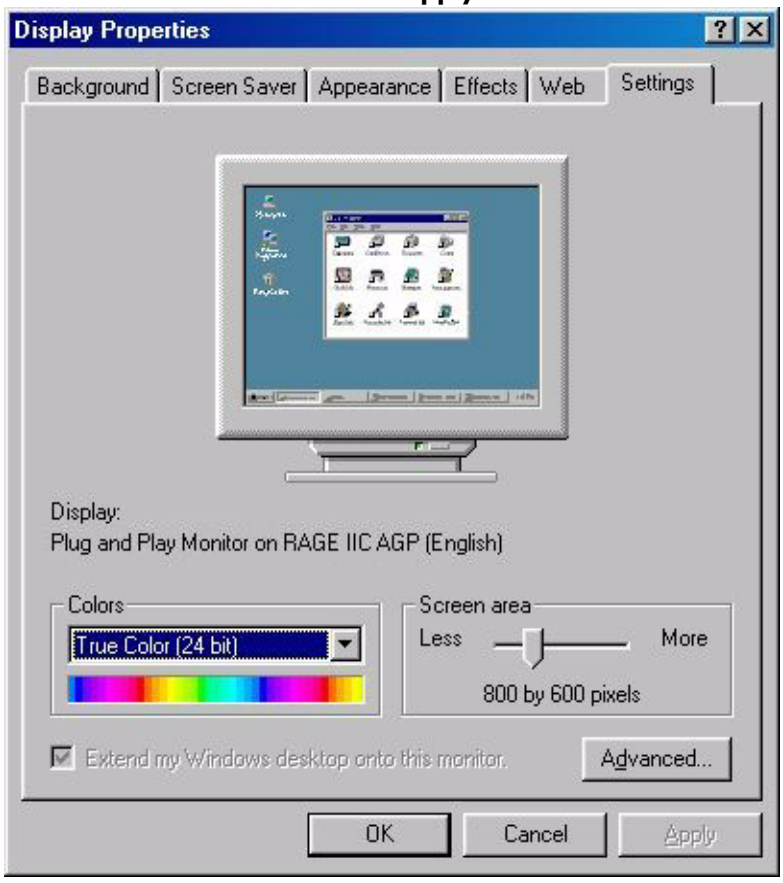
B. Choosing the best resolution

Due to the nature of LC display technology, the resolution is always fixed. For the FP791 this is a resolution of 1280x1024. This is called the "Native Resolution", which also represents the maximal resolution. Lower resolutions are displayed on a full screen through an interpolation circuit. Flaws do occur with the interpolated resolution compared to the native resolution. If you want to have all the advantages of LCD technology you must use the native resolution. Using Windows 95/ 98/ 2000/ XP you can change the resolution as follows:

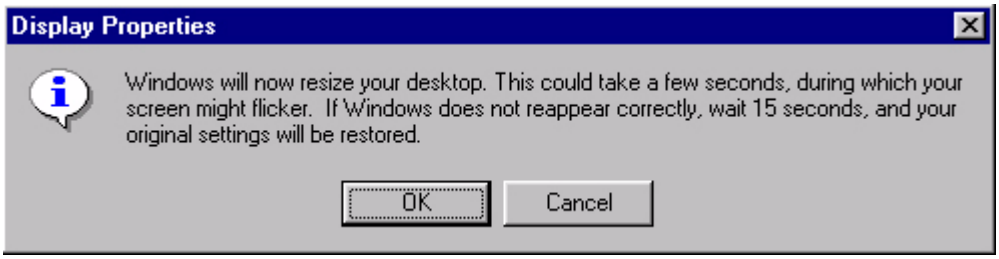
1. Double-click the "**Display**" icon in the Control Panel.

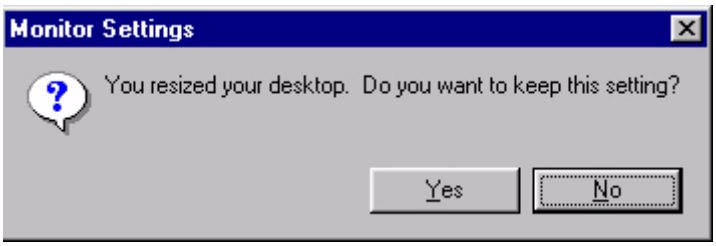


2. From the "**Display Properties**" window, select the "**Settings**" tab. You can alter the resolution by using the slider on the right-hand side.
3. Select a resolution of 1280x1024. Then click "**Apply**.".



4. In the subsequent windows, press "**OK**" and "**Yes**"



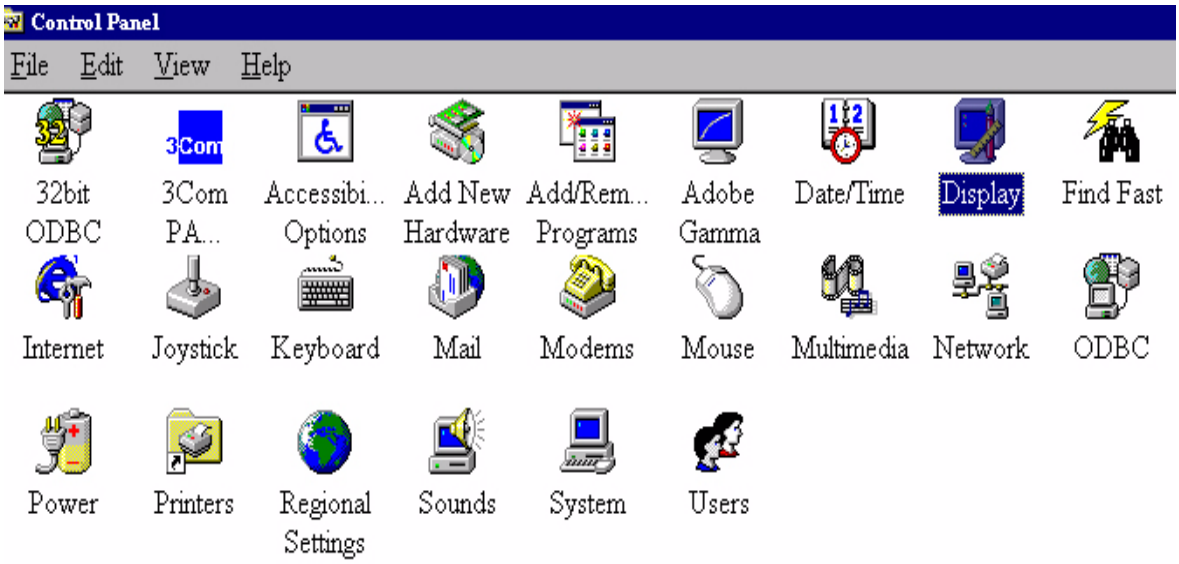


5. You can now close "**Display Properties**".

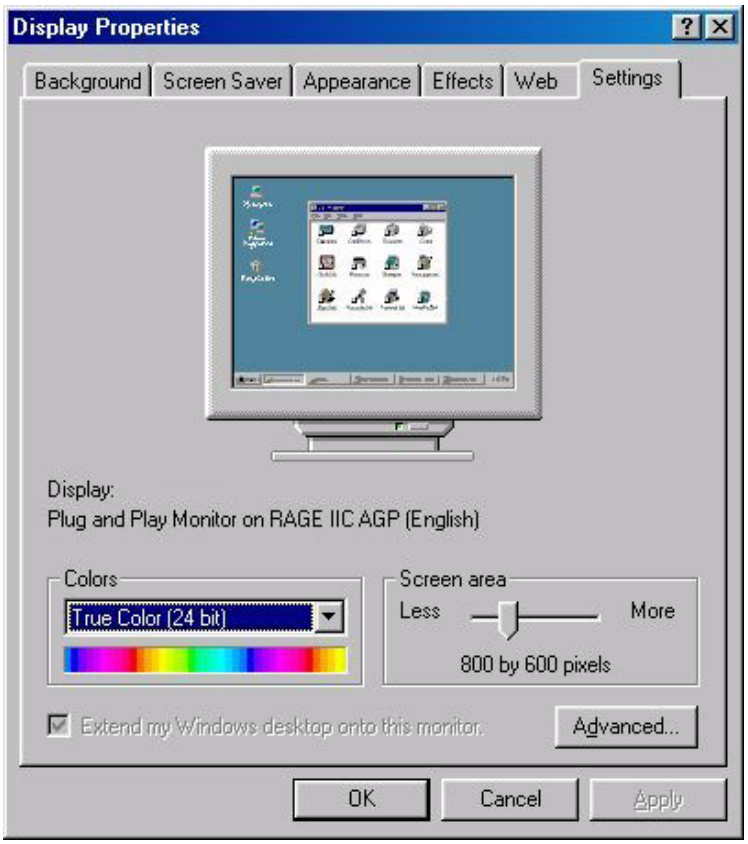
C. Refresh Rate Selection

There is no need to choose the highest possible refresh rate on an LC display. It is not technically possible for an LC display to flicker. Even at a refresh rate of 60 Hz you will get an absolutely flicker-free image. More important is that you make sure that you use one of the factory modes. In contrast to a modern CRT monitor, which is a multiscan monitor, the LC display is a multi-frequency monitor. This means, the best results are only obtained by using the factory modes. You will find a table with the factory modes in this user's guide. These modes, for example, are 60, 70 and 75 Hertz, but not 72Hz, for the native resolution of 1280x1024. In Windows 95/ 98/2 000/ XP you can change the refresh rate as follows:

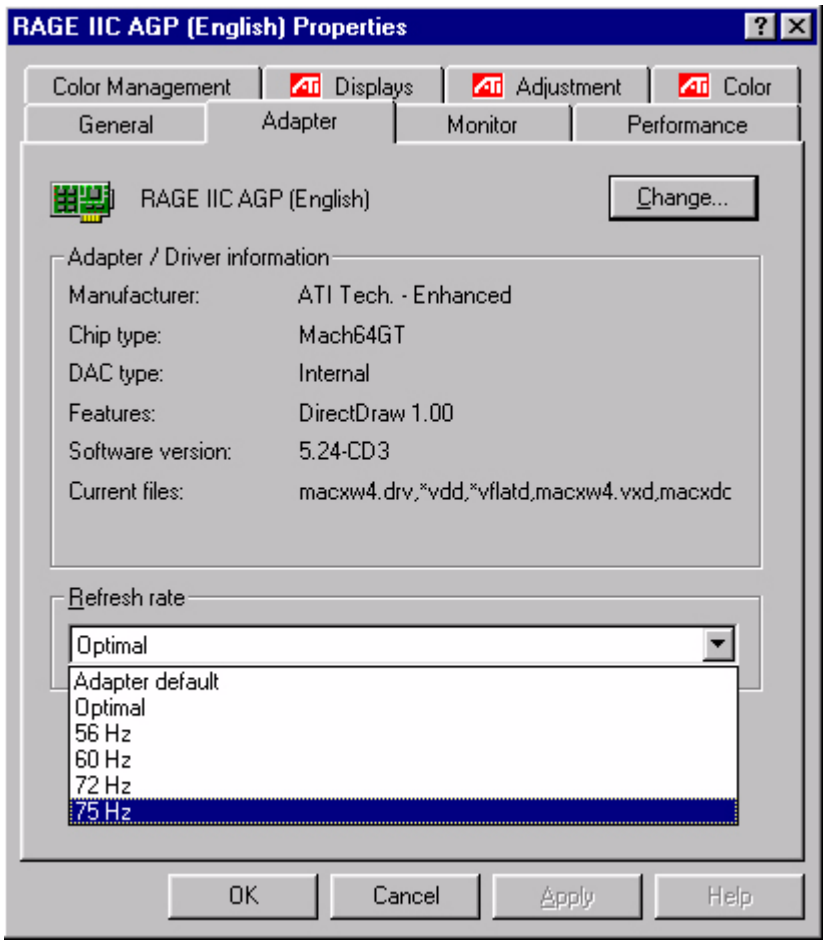
1. Double click the "**Display**" icon in the Control Panel.



2. From the "**Display Properties**" window, select the "**Settings**" tab. Click the "**Advanced...**" button in the bottom right corner.



3. Select the "**Adapter**" tab. The refresh rate selection field is located in the center at the bottom of the window.



4. Choose a refresh rate from the table with the factory modes, which can be found in the user's guide, and select this in the settings field.
5. In the subsequent windows press "**Change**", "**OK**" and "**Yes**".

6. You can now close "**Display Properties**".

D. Picture Optimization

The easiest way to obtain an optimal display is to use the *ikey* function. Press the "***ikey***" on the control panel and the monitor will adjust automatically.

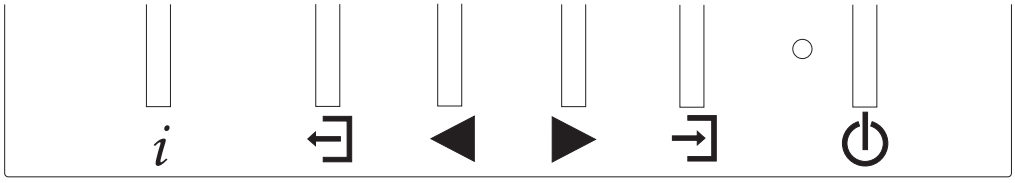
If you are still not satisfied with the result, you can still adjust the image manually.

1. Run the test program auto.exe from CD-ROM; this is the best way to observe possible changes. You can also use any other image, such as the desktop of your operating system. However, we recommend that you use auto.exe. As you run auto.exe, a test pattern emerges.
2. Press ⏎ on control panel to access OSD.
3. If there is vertical noise observed, press ◀ or ▶ key to select "**Geometry**" and press ⏎ key. Then press ◀ or ▶ key to select "**Pixel Clock**" and also press ⏎ key again. Now, press ◀ or ▶ key to adjust the monitor untill the noise disappears.
4. If there is horizontal noise observed, press ◀ or ▶ key to select "**Geometry**" and press ⏎ key. Then press ◀ or ▶ key to select "**Phase**" and also press ⏎ key again. Now, press ◀ or ▶ to adjust the monitor untill the noise disappears.

To make sure the "***iKey***" function perform well, you have to use one of the supported modes. If the "***iKey***" does not work properly and the "**NON PRESET MODE**" message is on the OSD, it means you are not using one of the supported modes. Please set your computer to use one of the supported modes. You will find a list of supported modes in this manual.

Adjusting the Monitor

A Look at the Control Panel



There are 6 keys for user's control including "*iKey*", "Exit", "Enter", "<" and ">" key and a power swith.The following descriptions are the introduction of these keys & switch.

1. "Power": Turn the power on or off.
2. "*iKey*" : Adjust vertical position, phase, horizontal position and pixel clock automatically.
3. (Exit) key: Back to previous menu or exit OSD.
4. (Enter) key: Activate OSD, enter sub menu, select items, confirm selection and hot key for OSD Lock.
5. (Left) key: For Left/Decrease adjustment. Left key is the hot key for Brightness and Contrast.
6. (Right) key: For Right/Increase adjustment. Right key is the hot key for Brightness Level.

Hot Key Mode

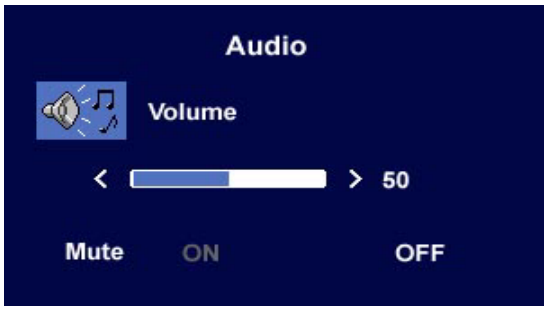
▶ Key, Brightness Level hot key

Press ▶ to enter Brightness Level selection menu, press ◀ or ▶ key to select one Brightness Level and press ⏎ key to exit OSD.	

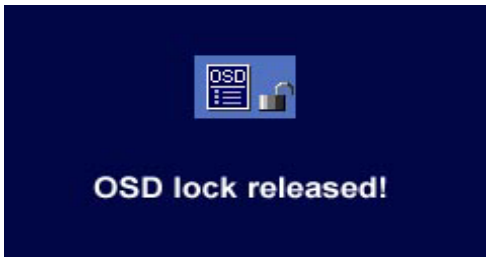
◀ Key, Brightness and Contrast hot key

Press ◀ or ▶ key to select Brightness or Contrast and press ⏎ key to enter sub menu. Brightness: Press ◀ or ▶ key to adjust the degree of Brightness, press ⏎ key to return to previous menu. Contrast: Press ◀ or ▶ key to adjust the degree of Contrast, press ⏎ key to return to previous menu.	

⏎ Key, Audio hot key

Volume: Press ◀ or ▶ key to adjust the degree of Volume. Mute: Press ⏎ key to turn on/off Mute function.	

Key, OSD Lock hot key

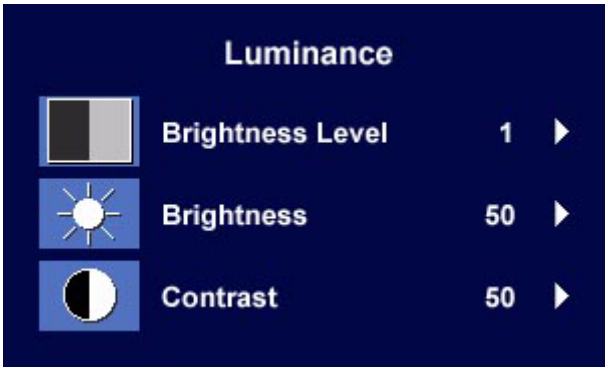
Press and hold key for 3 seconds to activate hot key.	
OSD lock: Press and hold key for 3 seconds to lock OSD.	
OSD unlock: Press and hold key for 3 seconds to release OSD lock.	

Main Menu Mode

Control Functions Available in Main Menu

Main Menu

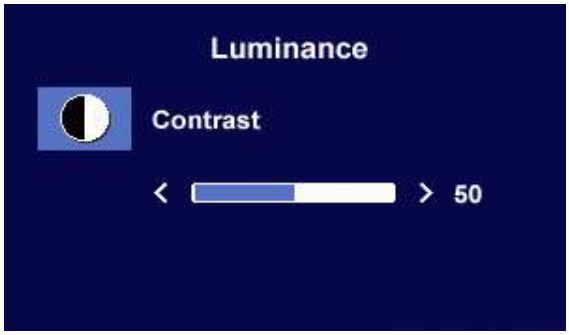
Luminance sub menu



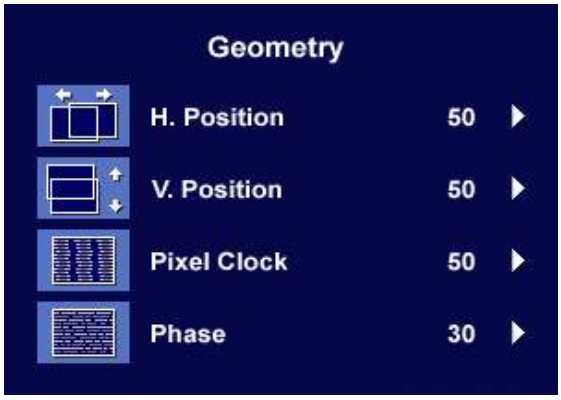
Press ◀ or ▶ key to select one Brightness Level and press ↵ key to return to previous menu.

Press ◀ or ▶ key to adjust the degree of Brightness, press ↵ key to return to previous menu.

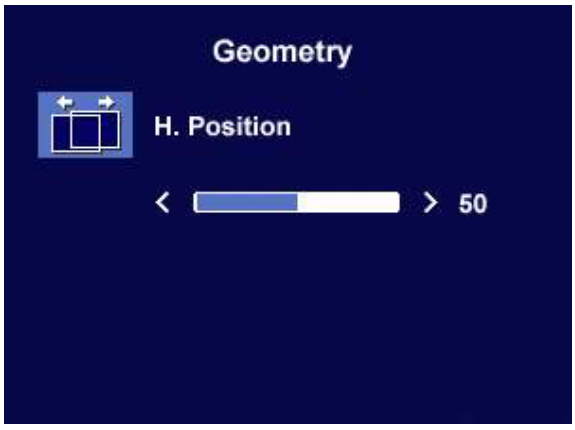
Press ◀ or ▶ key to adjust the degree of Contrast, press ↵ key to return to previous menu.



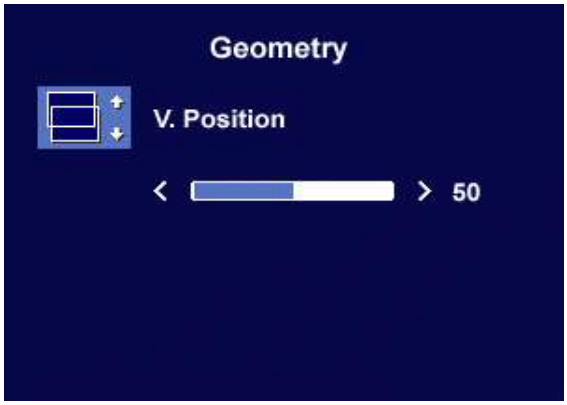
Geometry sub menu



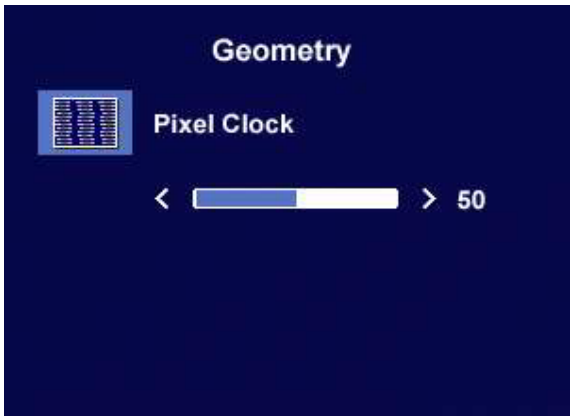
Press ◀ or ▶ key to adjust the Horizontal Position, press ↵ key to return to previous menu.



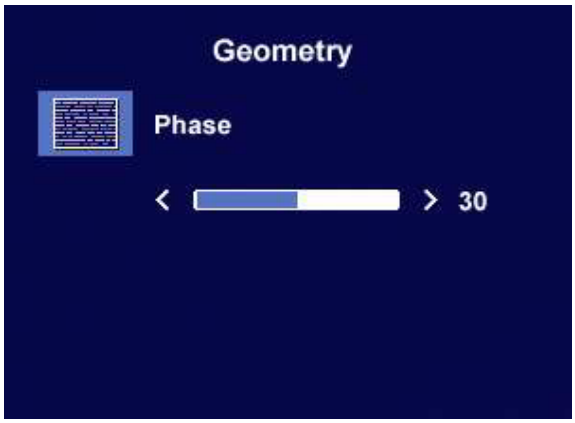
Press ◀ or ▶ key to adjust the Vertical Position, press ↵ key to return to previous menu.



Press ◀ or ▶ key to adjust the value of the Pixel Clock, press ↵ key to return to previous menu.

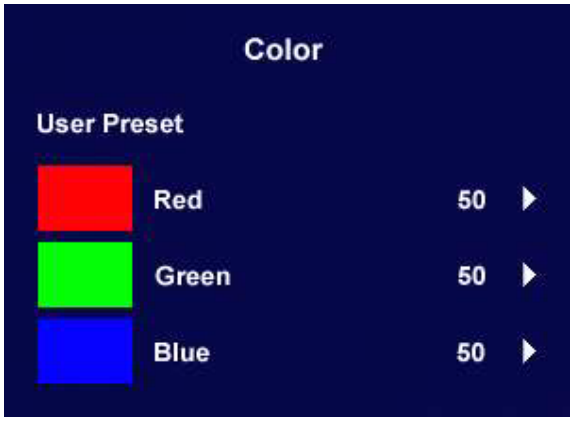


Press ◀ or ▶ key to adjust the degree of Phase, press ↵ key to return to previous menu.

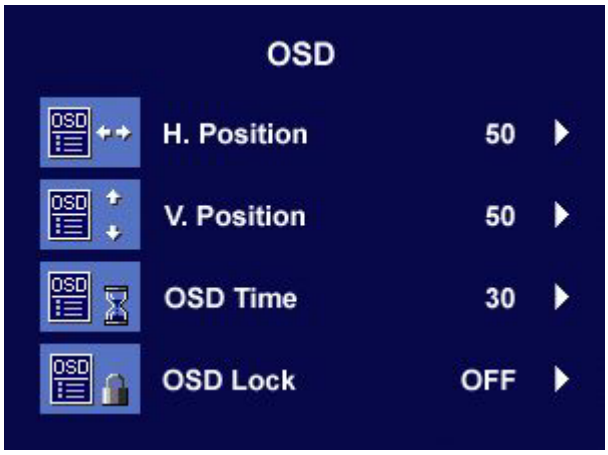


Color sub menu

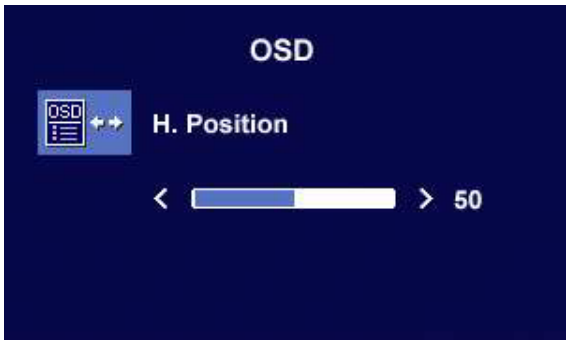
User Preset:
User may set the color balance of Red, Green and Blue.



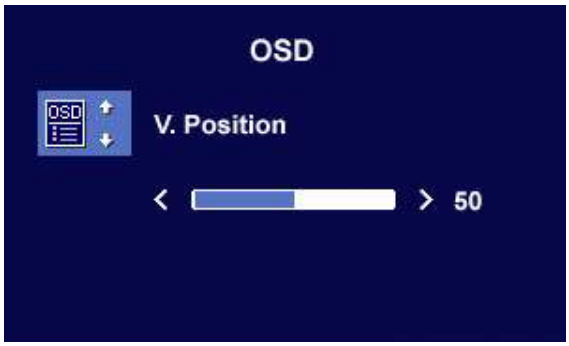
OSD sub menu



Press ◀ or ▶ key to adjust the Horizontal Position of the OSD, press ⏎ key to return to previous menu.



Press ◀ or ▶ key to adjust the Vertical Position of the OSD, press ⏎ key to return to previous menu.



Press ◀ or ▶ key to adjust the display time of the OSD, press ⏎ key to return to previous menu.

OSD Lock:
Locks the OSD and all OSD functions including deactivation of hot keys.

Recall sub menu

Press ◀ or ▶ key to confirm Position Recall, press ↵ key to recall position settings, or press ↵ key to return to previous menu.

Press ◀ or ▶ key to confirm Color Recall, press ↵ key to recall color settings, or press ↵ key to return to previous menu.

Press ◀ or ▶ key to confirm Recall All, press ↵ key to recall position and color settings, or press ↵ key to return to previous menu.

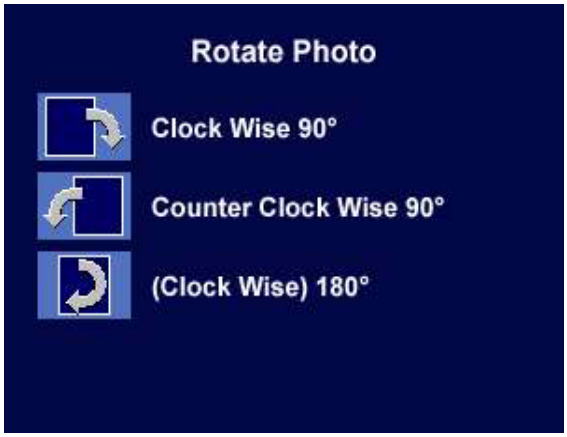
DPF sub menu

Select Card:
User may select from the following kinds of memory cards: Compact Flash, Security Disk/Multi Media Card and Smart Media.
Press ◀ or ▶ key to select card, press ↵ key to confirm, or press ↩ key to return to previous menu.

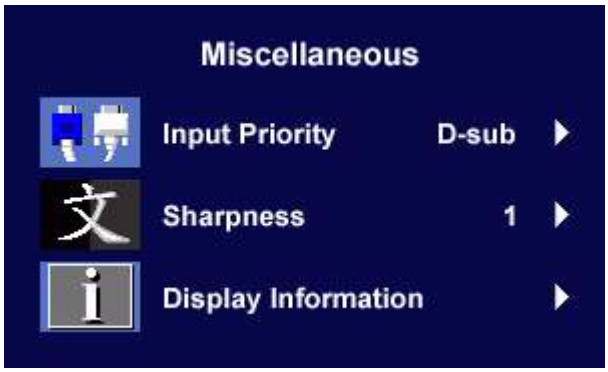
File Management sub menu.

Press ◀ or ▶ key to adjust the time gap of Slide Show, press ↩ key to return to previous menu.

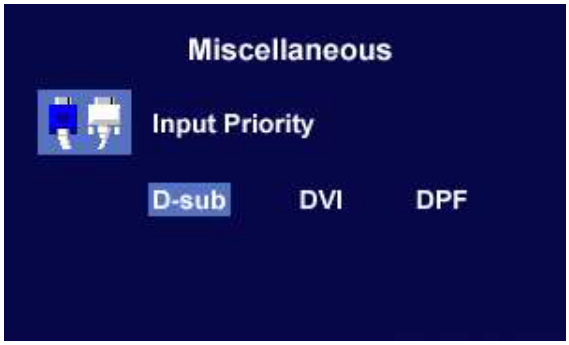
Rotate Photo:
Rotates photos from landscape mode to portrait mode.



Miscellaneous sub menu



Press ◀ or ▶ key to select input signal, press ↵ key to confirm, or press ↵ key to return to previous menu.



Sharpness:
When the resolution of the VGA card is not native solution (1280x1024), users may select the sharpness of the image.
Press ◀ or ▶ key to select Sharpness, press ↵ key to return to previous menu.

Press ↵ key to return to previous menu.

Audio sub menu

Press ◀ or ▶ key to adjust the Volume, press ↵ key to return to previous menu.

Press ◀ or ▶ key to turn on/off SRS function, press ↵ key to return to previous menu.

Press ◀ or ▶ key to turn on/off Mute function, press ↵ key to return to previous menu.

Troubleshooting

Frequently Asked Questions (FAQ)

✓ **The image is blurred:**

☞ Read the Installation/Adjustment section, and then select the correct resolution, refresh rate and make adjustments based on these instructions.

☞ How do you use a VGA extension cable?

Remove the extension cable for the test. Is the image now in focus? If not, optimize the image by working through the instructions in the Installation/Adjustment section It is normal for blurring to occur due to conduction losses in extension cables. You can minimize these losses by using an extension cable with better conduction quality or with a built-in booster.

☞ Does the blurring only occur at resolutions lower than the native (maximum) resolution?

Read the Installation/Adjustment section. Select the native resolution.

✓ **Pixel errors can be seen:**

☞ One of several pixels are permanently black, one or more pixels are permanently white, one or more pixels are permanently red, green, blue or another color.

Read the Pixel error rates section.

✓ **The image has a faulty coloration:**

☞ It has a yellow, blue or pink appearance.

On the monitor, press ⏎ key and press ◀ or ▶ key to move to the "Recall" icon and press ⏎ key to enter "Recall" sub menu. Press ◀ or ▶ key to select "Color Recall" and select "Yes" in "Color Recall" sub menu, then press ⏎ key to recall to factory settings. If the image is still not correct and the OSD also has faulty coloration, this means one of the three primary colors is missing in the signal input. Now check the signal cable connectors. If any pin is bent or broken off, please contact your dealer to get necessary support.

✓ **No image can be seen:**

☞ Is the prompt on the display illuminated in green?

If the LED is illuminated in green and there is a message "Out of Range" on the screen, this means you are using a display mode that this monitor does not support, please change the setting to one of the supported mode. Please read the Supported operating modes section.

☞ Is the prompt on the display illuminated in orange?

If the LED is illuminated in orange, the power management mode is active. Press any button on the computer keyboard or move the mouse. If that does not help, check the signal cable connectors. If any pin is bent or broken off, please contact your dealer to get necessary support.

☞ Is the prompt on the display not illuminated at all?

Check the power supply mains socket, the external power supply and the mains switch.

✓ The image is or distorted, flashes or flickers:

☞ Read the Installation/Adjustment section and then select the correct resolution, refresh rate and make adjustments based on these instructions.

✓ The image is displaced in one direction:

☞ Read the Installation/Adjustment section and then select the correct resolution, refresh rate and make adjustments based on these instructions.

Need More Help?

If your problems remain after checking this manual, please contact your place of purchase or e-mail us at: Support@BenQ.com

Supported operating modes

Incoming display mode(Input timing)					Multi-scan operation
Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Dot Clock Frequency (MHz)	Remark	Actual display resolution
640x350	31.47(P)	70.08(N)	25.17	DOS	1280X943
*720x400	31.47(N)	70.08(P)	28.32	DOS	1280X1024 full screen
640x480	31.47(N)	60.00(N)	25.18	DOS	
640x480	35.00(N)	67.00(N)	30.24	Macintosh	
640x480	37.86(N)	72.80(N)	31.5	VESA	
640x480	37.50(N)	75.00(N)	31.5	VESA	
800x600	37.88(P)	60.32(P)	40.00	VESA	
800x600	48.08(P)	72.19(P)	50.00	VESA	
*800x600	46.86(P)	75.00(P)	49.50	VESA	
832X624	49.72(N)	74.55(N)	57.29	Macintosh	
*1024x768	48.36(N)	60.00(N)	65.00	VESA	
1024x768	56.48(N)	70.10(N)	75.00	VESA	
*1024x768	60.02(P)	75.00(P)	78.75	VESA	
1024X768	60.24(N)	74.93(N)	80.00	Macintosh	
1152x864	67.50(P)	75.00(P)	108.00	VESA	
*1152x870	68.68(N)	75.06(N)	100.00	Macintoch	
1152x900	61.80(N)	66.00(N)	92.94	SUN 66	
*1152x900	71.81(N)	76.14(N)	108.00	SUN	
1280x1024	64.00(P)	60.00(P)	108.00	VESA	
1280x1024	75.83(N)	71.53(N)	128.00	IBM1	
*1280x1024	80.00(P)	75.00(P)	135.00	VESA	
*1280x1024	81.18(N)	76.16(N)	135.09	SPARC2	

- Modes not listed in the above table may not be supported. For an optimal picture, we recommended you choose a mode listed in the table above.
- There are 22 available modes that are compatible with Windows.
- Image disruption may occur as a result of signal frequency differences from VGA cards which do not correspond with the usual standard. This is not, however, an error. You may improve this situation by altering an automatic setting or by manually changing the phase setting and the pixel frequency from the "Geometry" menu.
- If you switch off the monitor, interference lines can occur on your screen. But do not be concerned about this, as it is normal.
- To extend the service life of the product, we recommend that you use your computer's power management function.

Specifications

Model	FP791
791Display type	17.0" ,active, TFT
Viewable diagonal	43.2 cm
Native (maximum) resolution	1,280X1,024
Colors	16.7 million
Contrast / Brightness	450:1 (Max. 550:1) / 350 cd/m²
Response time	16 ms
Viewing angle (left/right, up/down)	70/70, 70/70 (CR=10) 80/80, 80/80 (CR=5)
Line frequency	31.47 - 81.18 kHz Multi- frequency monitor
Image frequency	60 - 76 Hz modes within these parameters
Image checks	Digital, *Screen* OSD Technology, *iKey* (automatic image setting)
Controls	5 buttons and *iKey*.
iScreen functions	Contrast, brightness, vert. & hor. image position, phase, pixel clock, color balance, color palette, choice of language (8 language OSD), OSD position, status indicator
Power Management	VESA DPMS, EPA
Max. power consumption	50 Watt Max
Power saving mode	< 3 Watt
Input signal	RGB analog 0.7 Vpp/75 Ohm positive Digital: DVI-D
Synchronisation	TTL separate signal connection 15-pin mini D-sub cable
Temperature (operating)	5 °C - 40 °C
Air humidity (operating)	20% - 80%
Certifications	TCO 95, TÜV/Ergonomics, TÜV/ GS, FCC Class B, ISO 13406-2, VCCI, UL, CB Report, CE, C-Tick, BSMI, Fimko, GOST
Operating voltage	100-240 V, 50-60Hz
Dimensions (W x H x D)	451 x 443 x 192 mm
Weight	7.5 kg